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THE
HISTORY OF PLAGUE,
AS IT HAS LATELY APPEARED
IN
THE ISLANDS
OF
MALTA, GOZO, CORFU, CEPHALONIA, &c.
DETAILING IMPORTANT FACTS,
ILLUSTRATIVE OF THE
Specific Contagion of that Disease,
WITH PARTICULARS OF THE MEANS ADOPTED FOR ITS ERADICATION.

BY J. D. TULLY, ESQ.

SURGEON TO THE FORCES, MEMBER OF THE IONIAN ACADEMY, LATE INSPECTOR OF QUARANTINE,
AND PRESIDENT OF THE BOARD OF HEALTH OF THE IONIAN ISLANDS.

Εἴτε γὰρ μὴ θέλοισιν, δειδιότες, ἀλλήλοις προσιέναι, ἀπώλλυντο ἐρημοὶ καὶ οἰκίαι
πολλὰὶ ἐκενώθησαν ἀπορίᾳ τῇ θεραπευσεντῶν· ἢ τε προσίοισιν, διεφθειρόντο·

Thucydides, Bel. Pelop. An. II. A. C. 430.

“ For if fear withheld them from going near one another, they died for want of help, so that many houses became quite desolate for want of needful assistance; and if they ventured they were gone.”

Smith's Translation.

London:

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TO

HIS EXCELLENCY THE RIGHT HONOURABLE

SIR THOMAS MAITLAND,

KNIGHT GRAND CROSS OF THE MOST HONOURABLE MILITARY ORDER OF
THE BATH,

One of His Majesty's Most Honourable Privy Council,

LIEUTENANT-GENERAL AND COMMANDER-IN-CHIEF OF HIS MAJESTY'S
FORCES IN THE MEDITERRANEAN,

GOVERNOR OF THE ISLAND OF MALTA AND ITS DEPENDENCIES,

HIS MAJESTY'S LORD HIGH COMMISSIONER IN THE UNITED STATES OF THE
IONIAN ISLANDS,

AND GRAND MASTER OF THE MOST DISTINGUISHED ORDER OF
ST. MICHAEL AND ST. GEORGE,
&c. &c. &c.

WHOSE PRACTICAL EXPERIENCE IN MATTERS OF PLAGUE,

AND

WHOSE ENLIGHTENED VIEWS ON ALL SUBJECTS,

CONSTITUTE HIM THE BEST JUDGE OF THE SUBJECT OF THIS WORK,

The following Pages

ARE

DEDICATED BY PERMISSION,

AND WITH THE MOST PROFOUND RESPECT,

BY HIS EXCELLENCY'S

MOST OBEDIENT,

MOST DEVOTED,

AND MOST FAITHFUL SERVANT,

THE AUTHOR.

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PREFACE.



A PARLIAMENTARY Inquiry having been recently instituted, in order to ascertain the true nature of Plague, the Writer of the following Sheets has been induced to present himself to the Public, for the purpose of stating the result of his practical Experience in regard to this important Question.

In exhibiting the fallacy of those very extraordinary Doctrines, which have been lately advanced on the Subject of Plague, he has been actuated solely by a feeling of moral Obligation to that Public, whom he has so long and so faithfully served.

It was originally intended to have offered to the Profession a Medical Treatise on this Disease; but the more popular view of the Question having become more immediately connected with the Public

Interest, in consequence of the Doubts which have been raised as to its specific Contagion, the Author has been induced to confine himself to the Histories of those Plagues, which have occurred within the Mediterranean, during the last Seven Years, and to deduce from the Facts therein recorded, the specific Character of the Malady.

The Transactions herein detailed, as having taken place in the Ionian Islands, have been founded on the official Reports of the Writer to his Majesty's Government, at the Period of their Occurrence, nearly five Years since, when he never imagined that the contagion of Plague could be doubted.

The Particulars of the Plagues at Malta, Gozo, and Noia, are compiled from the most authentic Sources of Information, confirmed by the personal Evidence of the principal Actors in the Scenes described, as well as by the official Documents published on the Occasion.

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HISTORY OF THE PLAGUE,

&c. &c.

CHAPTER I.

The destructive Effects of Plague universally acknowledged.—Establishments to confine its Influence consequently raised.—Examination of the Principles on which these Establishments are founded.—Brief Abstract of the History of Plague, proving the Disease to be contagious.—Proved also by the Plague at Marseilles in 1720, by that in Messina in 1743 ; and by those in London, 1593, 1603, 1625, and 1665.—Speculative Opinions of Dr. Stoll, of Vienna, refuted by Mr. Howard, the Philanthropist.—Opinions of some late Writers.—Dr. M'Lean and Dr. Calvert.—Examination of the principal Argument for the Non-contagion of Plague adduced by Dr. M'Lean.—It is equally calculated to establish the Doctrine of Contagion.—Some Instances may be found in which actual Contact has failed to communicate the Plague.—This Peculiarity accounted for.—Refutation of the Opinion that Plague is communicated by the Atmosphere.—Examination of Dr. Calvert's Doctrine.—Neither Heat nor Cold to be relied on as a Means for checking the Progress of Plague.

OF all the diseases that afflict the human race, none is more awful in its character, or more de-

structive in its influence, than the plague. There are few nations which have not, at some period of their history, groaned beneath this dreadful calamity, and thus proved, from fatal experience, the appalling extent of its ravages. Indeed, the inhabitants of those countries, which are more particularly subjected to this malady, have been for ages so strongly impressed with a conviction of its devastating influence, that they patiently succumb beneath its power: they regard its appearance among them, as a direct visitation from heaven; and, swayed by that mental indolence,—that belief in fatalism,—so peculiar to their character, they consider the adoption of any measures for the purpose of arresting its progress, as a species of impiety.

The more civilized part of mankind, though equally convinced of the alarming mortality attendant upon plague, are actuated by a more enlightened policy. They regard it as the most inveterate and extensive of national evils; and instead of tamely bending to the disease, they rouse their best energies to resist it. With this view the different governments throughout Europe, have reared establishments for the express purpose of protecting the people committed to their charge, from the direful effects of plague.

An evil, which is so universally acknowledged and feared, cannot be too closely examined into: and the cause of humanity requires, that the prin-

ciples, upon which the system established for our preservation is founded, should be clearly understood and approved of.

Our information regarding plague, in the earlier ages of the world, is very imperfect; for little more is known than can be obtained from the historical accounts which have been handed down to us of its extensive ravages among the Grecians.

The true source and seat of the disease appears to be universally attributed to Egypt. Thucydides considers the great plague at Athens, 430 years before the Christian era, as coming from that part of *Æthiopia* which borders upon Egypt, spreading from thence into Egypt and *Lybia*, subsequently raging in many of the neighbouring countries, particularly at *Lemnos*, previous to its appearing at Athens, when it first shewed itself in the *Piræus*; and *Procopius*, in noticing the dreadful effects of the pestilential disorder, which spread its influence throughout the whole of the known world, for the space of fifty-two years, traces it from *Pelusium*, (an ancient city, whose site was near the modern *Damietta*) from thence to *Alexandria*, *Palestine*, *Constantinople*, and so on to the whole of those other countries which were unhappily subjected to its influence.

The first introduction of plague into modern Europe, is traced to the same source, at the pe-

riod of the Crusades; being principally propagated by the constant intercourse which then took place between the inhabitants of the East and the natives of European countries. It has since appeared in various kingdoms and populous cities, and through various channels; but it has almost invariably been imported from Egypt, Turkey, or Africa, in which countries we can scarcely look forward to its extinction, so long as the inhabitants of those parts continue bigoted to those principles of predestination, which prevent them from taking any measures for its eradication.

The contagion of plague is thus proved by the general History of its progress, and Medical Science has been, for centuries past, accustomed to speak of it, and to treat it as a contagious disease; a disease, governed by a peculiar law, and propagated by a specific virus. Long experience has established the truth of this doctrine, and it has been confirmed, in later times, by the experiments made by White, Valli, and others.

Happily for mankind, the concurrent testimonies, which past ages have presented, to stamp the true nature of this disease, have been sufficient, hitherto, to induce a general belief, among those who are practically acquainted with the subject, in its specific contagion, that it is communicated by personal contact alone, and that seclusion and separation are the only

means of checking its operation, and of ultimately exterminating its power.

It is true that fanciful theorists have sometimes hazarded a contrary doctrine, but experience has always proved its fallacy.

During the period that the populous city of Marseilles was visited by this disease in the year 1720, the physicians of Paris entertained an opinion, that it was not contagious, and their delegates in the infected city acted conformably to this opinion. The fatal consequences are too well known ; 60,000 people fell victims to the disorder in the short space of seven months.

A similar prepossession induced the faculty in Sicily to declare the distemper which ravaged the city of Messina in 1743, not to be of a contagious nature ; and in the short space of three months 43,000 individuals were sacrificed. The theoretical doctrine of non-contagion being in these instances so immediately refuted by the plain demonstration of facts, it cannot be expected that we should consider these cases as exceptions to the general belief in contagion.

But amongst the numerous instances of the introduction of plague into Europe, history is nowhere more faithful in tracing it to contagion than in our own country, where the baneful effects of this disease have, from time to time, been as severely felt as in most other parts of the world. In the year 1593, when the plague

destroyed in London 11,503 persons, it was satisfactorily ascertained that the contagion was imported from Alkmaar. In 1603, when 36,269 individuals fell victims to it in the same city, it was well known to have been imported from Ostend. In six years afterwards, it appeared again at Alkmaar, and also in Denmark ; but in consequence of all communication between those places and England being suspended, it did not then reach Great Britain. In 1625 it broke out in London, and its introduction was clearly traced from Denmark ; its ravages during the year exceeded 35,417. Again, in 1636, it destroyed 13,480 persons in London, when it was imported from Leyden. In 1665, the disease made still more lamentable ravages in that metropolis, destroying, according to the smallest calculation, 68,596 inhabitants. Since then it has been kept out of England by the strict application of the laws of quarantine, thereby distinctly proving its dependence upon a specific contagion.

In reverting to the opposite doctrines which have been held on this subject, it appears that Doctor Stoll, of Vienna, published some speculative opinions against the contagion of plague ; but in this instance, he must be regarded as a political, rather than a medical writer, arguing from expediency rather than experience.

Mr. Howard, the philanthropist, in his excel-

lent work on Lazzarettoes, has exposed the errors of this writer, and has brought forward, in opposition to them, undeniable proofs, obtained by himself in person, from the most experienced practitioners, in matters of plague, who were living in his time; and to use his own words, “ They all, in the most explicit manner, concur “ in representing the plague as a contagious “ disease, communicated by actual contact with “ infected persons or things.”

This evidence being grounded wholly on positive practice, becomes the more entitled to attention; and it may, therefore, be useful to cite two or three extracts from it.

Fra Luigi di Pavia, of Smyrna, where the pestilential disorder is always more or less prevalent, says, “ The plague is communicated by “ contact, according to all the observations I “ have been able to make for the last eighteen “ years.”

Raymond of Marseilles, is equally positive. “ Incontestable experience daily proves, that it “ only proceeds from contact.”

Demollins, of the same city, observes, “ From “ all ages, the plague has only been brought to “ Marseilles by merchandise, or by persons from “ beyond sea.”

Giovanelli, of Leghorn, after expressing the same opinion, adds, “ and the air cannot be the “ vehicle of the contagion.”

Notwithstanding this strong body of evidence, and in spite of the well-founded concurrent opinions generally entertained on the subject, in countries where daily experience proves the true character of plague, some late writers have contended, that it is not to be communicated by contact at all; while others have maintained that, although it may be sometimes contagious, it is equally under the influence of atmospheric law.

Among these we find Doctor Maclean has undertaken to advocate the former opinion.

There is one argument brought more prominently and more frequently forward than any other by those who contend for the non-contagion of plague.

If the progress of the disease (say these writers), depends wholly upon personal contact with infected persons and things, its ravages would never cease in those countries where no precautionary measures are taken to prevent communication between the infected and the healthy.

Doctor Maclean considers this observation as unanswerable, and hence infers, with seeming triumph, that in 'Turkey, where no exertions are used to stop the contagion, there would be no cessation of the malady until it had swept away the whole of the population.

This is assuming too much: to a certain extent, however, the inference drawn by Doctor

Maclean is correct, inasmuch as we rarely hear of the total cessation of plague in Turkey ; there are only temporary intervals of calm, in which the disease slumbers for a time, breaking out, perhaps, with increased violence, in the succeeding year.

Yet this is no argument against the positive contagion of plague ; and it is on this account that we contend Dr. Maclean has assumed more than the fair reasoning which can be drawn from his position will sanction, when he states it as such. It is a position equally calculated to establish the doctrine of contagion as to prove the contrary, inasmuch as the plague may be said to be constantly prevalent in Turkey, from the circumstance of its continually recurring after its occasional disappearance. It is therefore not more than just to attribute this continual recurrence of the malady to the absence of all precautionary measures ; as we observe, in those countries where the quarantine regulations instituted to prevent the importation of this disease are strictly adhered to, the plague seldom makes its re-appearance but after the lapse of centuries, and then only from some accidental contravention of the existing laws against it.

Hence, we may fairly infer, that the greater degree (when compared to those of European states), in which the inhabitants of Turkey suffer from the plague, arises from their neglect of the only means of prevention which can

stop the progress of the disorder, seclusion and separation ; thus most clearly establishing the doctrine of its specific contagion.

But it may be said, that in thus accounting for the greater mortality, which prevails in places where no precautions are taken against plague, we have not satisfactorily explained the reason why contagion has not entirely depopulated those countries. It is true the argument has been taken in its more restricted sense, as in this sense only can it be considered sufficiently plausible to raise a reasonable doubt in the mind of an inquirer. But we are equally willing to meet the question in its literal and more enlarged interpretation.

Although it is contended that the plague is contagious, it is not denied that many instances may be found in which actual contact has failed to communicate it, as daily experience shews us, that we are occasionally exempt from the influence of all contagions. But as the peculiar laws, which regulate this occasional exemption from the general influence of contagion, are unknown, it is impossible to ground any practical security upon them. The doctrine of the contagion of plague is, therefore, by no means weakened by this circumstance. Those who have examined into the nature of plague, even from the earliest ages, have been aware of this difficulty ; but they have not, on that account,

withheld their belief in its specific contagion. The great father of medicine, Hippocrates, has established it as an axiom, which has been acknowledged by every succeeding writer of note upon the same subject, that the action of the pestilential venom is augmented, diminished, destroyed, or partially modified according to the different constitutions of the persons exposed to its influence. That all specific contagions are under some peculiar law, will scarcely be doubted. The mild state of syphilitic disease among the natives of Portugal, and the virulence with which it attacks foreigners in the same climate, tend to prove, as we may infer from the writings of Mr. Ferguson, that a morbid poison may degenerate (and perhaps ultimately wear itself out), among a particular class of people. May not the virulence of plague in like manner be sometimes destroyed, in passing from one individual to another, and within a determinate period, favoured by some unknown law, run its course ?

The history of small pox too offers another proof of this peculiarity. Many individuals have repeatedly resisted the effect of inoculation, who, years afterwards, were unexpectedly attacked with the disease ; whilst others had passed through life, repeatedly exposed to the contagion without ever having incurred it.

These observations tend to shew, that there

are diseases, universally acknowledged to be contagious, which do not act with equal virulence, upon all those who are exposed to their influence; and, even upon some individuals, it is proved that they have no effect at all. Yet no one has ever affirmed, on this account, that the diseases alluded to are not contagious.

The occasional exemptions from the contagion of plague are precisely of the same nature. They ought not therefore to be brought forward, as objections, against the specific contagion of that disease; or if they are, the same difficulty ought to be raised against the contagion of the small-pox, venereal disease, and other distempers of a similar character, in regard to the true nature of which our daily experience speaks so decidedly, that any attempt to disprove their contagious powers would not be able to find a single convert, even among the most chimerical.

But independently of these observations, it must be admitted, that although plague is a disease unquestionably in the highest degree contagious, yet, when communicated by contact with infected goods (which we know to be a mode in which it is very frequently communicated) some incidental circumstances always intervene, even amongst an unprepared population, which tend to throw impediments in the way of its speedy and indiscriminate dissemination. When the disease is contracted by the

direct handling of infected goods, and the virus by this means absorbed into the system, our wearing apparel may at the moment of our own infection escape contamination; and when this is the case, our apparel must continue free from taint until such time as strong morbid action from the absorbed poison shall have taken place in the system; at which period alone our clothes can become contaminated, and communicate the contagion. Until this state of the system shall have taken place, it necessarily follows that, even persons in daily intercourse with us under these circumstances, will escape infection. Thus, with the disease engrafted upon us, we may be abroad and mingling with the crowd without any danger accruing to the community at large. It will also be hereafter shown, that in some instances the plague carries off its victim before any general communication can take place between the infected and the public; the first symptoms of the disease being frequently ushered in towards evening or at night, when the unhappy victim retires to his bed to rise no more.

These incidental circumstances must, in many instances, prevent the extension of plague, and will further explain the escape from contamination of a considerable number of persons among a mixed population, with whom no precautions are avowedly resorted to for the prevention of the evil, and will also account for the apparel of

persons dying of plague being in some cases free from infection. It must likewise be observed that it does not at all follow, nor is it the case, that we are constantly in communication with every person we encounter in the streets of a large capital; indeed in no country in the world (happily for the inhabitants) is there less direct communication than in Turkey, where even the common form of salutation amongst Europeans, that of shaking hands, is quite unknown, the inhabitants of the East observing a form totally different in itself, forbidding all personal communication; and perhaps our custom of salutation is one of the causes why the plague in its onset in European countries becomes so widely disseminated.

The true character of plague, and the means by which it is propagated, will, we trust, be established ere long upon principles equally firm and immutable; and it is only owing to the historical facts, which peculiarly mark this disease, not being sufficiently known and investigated, that this desirable object has not been effected before the present period.

Even what has been already said, will be considered by all those whose minds have not been strongly pre-occupied by the contrary opinion, as a complete refutation of the principal and favourite argument of the advocates for the non-contagion of plague. But lest our reasonings

on this subject should be deemed inconclusive, we shall proceed briefly to prove, that this objection, which has been brought against the doctrine of contagion, is equally applicable when opposed to the sytem of non-contagion.

Since the plague is a distemper general and universal in its operation, inasmuch as it attacks many people at the same time, it must, of necessity, be dependant upon some propagating cause, which is equally general and universal. The cause, we contend, is contagion. Those of a contrary opinion, have attributed the origin of this malady among us, to various other general causes, the most prevalent of which appears to be a diseased and infected state of the atmosphere.

Let us, therefore, examine the argument, which has been adduced to disprove the contagion of plague—apply it to a distemper communicated by means of an infected atmosphere, and we shall find it equally cogent and applicable.

The argument has already been stated:—that, in Turkey and other eastern countries, the plague has frequently made its appearance; that the whole of the population have been exposed to the destructive influence of its contagion, in consequence of no precautionary measures being adopted to prevent contact and communication; that, notwithstanding the continual exposure to danger, those countries have never been entirely depopulated by the ravages of the plague, and

that even a great part of the inhabitants have not been affected by the disease at all. This, it is assumed by Dr. Maclean, directly proves that the plague is not propagated by contagion.

Let us then, for the sake of argument, suppose that the plague is propagated by a diseased state of the atmosphere. This is a cause equally general in its operation with contagion: it might even with much propriety be said to be more universal in its influence.

The population, not of Turkey alone, but of all those countries even in Europe, where plague has at any time prevailed, have been exposed to the danger of its infection. Thousands of human beings have breathed the same air, have inhaled the same contaminated atmosphere, with those victims of pestilential distemper, who were hourly and daily dying around them: yet they have lived through the period of the disease, unaffected and unhurt by the supposed cause of infection. Following, therefore, the course of those, who have, with the very same argument, combated the doctrine of contagion, we conclude, that the plague is not less disseminated by any atmospheric cause.

This leads me to notice the opinion of a late writer on this subject, who expresses himself as follows: " It appears to me that this contagion, " or principle of plague, is diffusible in the at- " mosphere, to a distance greater or less from

“ an infected body, according to the climate
“ and season of the year, and possibly to other
“ peculiar states of the atmosphere, with which
“ we are unacquainted ; that in the spring, or
“ summer season, a single infected person is
“ sufficient to contaminate the air of a whole
“ city ; and that those who happen to be thus
“ exposed to febrile causes, or otherwise pre-
“ disposed, are the first to become its victims ;
“ that these newly infected persons generate a
“ fresh supply of poison, increasing its strength
“ and influence, till at length it becomes so
“ powerful, that nothing but the winter season
“ will entirely put a stop to it.”

The author has been induced, we presume, to form this opinion, from the circumstance of the cessation of the plague, during its late appearance in Malta early in the month of November. But the opinion is evidently founded in error, and is scarcely reconcileable with the known accuracy of this author's writings in general. It will be proved, that season has nothing whatever to do with plague, and on no account must we permit an opinion, thus upheld, to interfere with our belief in the all-prevailing influence of that main principle, by which the disease has been diffused, from its first appearance among mankind to the present period,—personal contact, and communication.

That the extremes of heat or of cold are

neither of them to be relied on as a means for checking the propagation of plague in those countries subject to the disease, can be satisfactorily proved by strongly attested facts;—our own knowledge of this disease, as well as the history of every well-authenticated plague, which has been handed down to us, teaching us, that its ravages, under whatever climate its baneful influence has been felt, have been alike extended to every season: Spring, Summer, Autumn, and Winter, indiscriminately furnishing their quota of mortality. It is quite unnecessary to revert to the pages of history, in order to maintain this assertion. We need only refer to the progress of the malady in Constantinople and Egypt, within the last ten years, and we shall find (independently of what has occurred both in Malta and the Ionian Islands) abundant matter calculated to support this statement. Every body who has resided for any number of years in the Mediterranean, and who has taken an interest in the occurrences within its precincts, will immediately recollect and be able to testify, that neither the extremes of heat, or of cold, in either of the above-mentioned places, have been found to arrest the progress of plague: indeed it is but a few years since the mortality by this disease at Constantinople, exceeded two thousand daily, and at that fatal period the streets of that capital were covered with snow.

In regard to the dissemination of plague by means of the atmosphere, whereby, as the author above alluded to expresses it, “a single infected person is sufficient to contaminate the air of a whole city,” we have a sufficient number of proofs, derived from practical experience, to enable us to refute the doctrine altogether. If the principle, by which the disease is communicated, were to extend itself in this manner, the consequences, on its first appearance among a community, would be immediately and severely felt: its activity and virulence would be uncontrolled: there would be no limitation to its destructive range, as no means of precaution could be had recourse to. Neither guards, cordons, bolts, bars, seclusion or separation would be capable of confining its sphere of action. The infection would speedily spread itself through its proper medium, and all would be alike exposed to its baneful influence. Scarcely an individual would escape from an infected city, to tell to after-ages the untimely fate of its inhabitants.

Yet we know the very contrary of all this has been the case, in every plague of which history has handed us down any account. The progress of mortality, during the prevalence of the disease, has been more or less extensive, according to the means which have been adopted

to prevent communication; and if precautions of this nature have been altogether neglected, or but partially enforced, the number of deaths has been so great as almost to stagger belief; the instances, before alluded to, when the contagious nature of the malady was not sufficiently understood in Marseilles and in Messina, and the daily evidence afforded by the constant devastation occasioned by this disease in Egypt and Turkey, testify the truth of this observation. But, even from the histories of these plagues, examples may be selected, which will shew that, when circumstances or custom have restricted any part of the inhabitants to a seclusion and separation of intercourse, they have always continued healthy and free from danger, when surrounded by and in the very midst of the distemper. It will be sufficient to bring forward one or two facts, stated by Monsieur Deidier, Physician at Marseilles, to have occurred within his own knowledge during the existence of the plagues in that city.

The "*Monastère de la Visitation*," the inmates of which were very numerous, had the Pest Hospital on one side of it, and the Burial Place for those carried off by the plague on the other. M. Deidier adds, "if the infection of the air caused the distemper, how was it possible for the inmates of this establishment to

“ escape? Yet not one of them was attacked
“ with the malady during the whole period of
“ its existence in that city.”

Another convent, without the gate of the city, on the road to the Pest Hospital, was so situated, that the principal part of the suspected and infected were carried by the door, many of them in a frantic or dying state, when the poison of the disease was most virulent; yet none of the inhabitants of this convent experienced the baneful effects of the prevailing malady.

Mead, and Muratori, produce similar proofs: the former says, that when the plague was last in England, while it raged in the town of Cambridge, the colleges remained free from infection, by keeping apart from the town's-people; and Gastoldi records, that in a plague at Rome, in 1656-7, the monasteries and nunneries, for the most part, were secured from danger by using the same precautions.

Many other facts of a similar tendency might be adduced; but it will suffice, for the present, to affirm that, if the poison of plague be diffused, agreeably to the belief of recent writers upon this subject, each individual who entered a Pest Hospital, would experience the fatal effects of the pestilential miasma, with which every crevice of the building would be impregnated. Yet how very few professional men have suffered from their constant visits to these recep-

tacles of wretchedness ; indeed it may safely be said, that none have been attacked with the disease, but through rash or accidental neglect of the established precautions against contagion.

Health guards have, in general, been equally fortunate, although only removed from the unhappy objects of their vigilance, by a barrier formed of a simple wooden paling, sufficient to prevent actual contact with persons labouring under disease, or effects imbued with the matter of the contagion, but of course not sufficient to repel infection, if the air be the vehicle by which it is conveyed. But the air cannot be the vehicle of infection, as, if it be, we must consider the disease to be one of a very novel and peculiar nature, shedding its worst influence on one class of people, whilst it offers to others the most abject respect ; selecting alike particular houses and apartments, without regard to the cleanly street or dirty lane, the airy and comfortable habitation, or the confined and miserable hovel ;—*the lofty mountain or the lowly valley* ;—acting on principles contrary to the established law that conducts the march of all infections and epidemic diseases, but perfectly characteristic of, and consistent with, the progress of plague, which is known to introduce itself into every angle and corner, and to avail itself of every channel of communication, indis-

criminally attacking all within the sphere of its influence.

Although in what has gone before, the influence of season upon plague has been denied, yet we are free to admit, that in some particular countries there is an apparently plausible foundation for the belief, that this disease is under the influence of climate; as we are credibly informed by persons who have resided for many years in Arabia, that the disease in that country has its boundaries.

That this is the case we may fairly infer, when we examine the nature and extent of the commercial intercourse between Palestine, Syria, Arabia, and the East Indies. Caravans are constantly conveying susceptible effects from Damascus and Aleppo to Bussorah, from whence they are shipped for the East Indies; and although each of these countries has, from time to time, been visited by plague; and although it has been known that many of the crews of ships engaged in the commerce between the Gulph of Persia and Bombay, died of that disease, yet it does not appear that the plague ever reached Guzarat, Surat, Bombay, or any other part of the East Indies. It is not improbable that this exemption may be owing to the high atmospheric temperature in those latitudes being sufficient to destroy the contagion of plague—a temperature unknown in those countries which

are the constant seat of this malady. That the same exemption might occur in the colder latitudes, is not altogether improbable; yet we have nothing like satisfactory proof of the point at which contagion, under those circumstances, would cease to develop itself. However this may be, let not those who contend that the atmosphere is the disseminator of plague, maintain, that what has been here adduced, is a further argument in favour of their doctrine. The laws of contagion are involved in too much obscurity, to admit of any other explanation of this extraordinary phenomenon; and the facts which have been already stated, are sufficiently clear to demonstrate the impossibility of infection being, in the most remote form, connected with plague.

It has already been stated, that plague is unquestionably one of the most dreadful diseases with which we are acquainted; and were it capable of being communicated by atmospheric causes, were it an epidemic visitation in those countries where we ourselves have witnessed it, widely different would have been its consequences.

But Providence, in inflicting this calamity, has wisely ordained, that there should be some limitation to its destructive range, and by stamping it with specific contagious powers, has checked the fatal consequences which would

otherwise result. Even under this form, the rapidity with which it sometimes communicates itself amongst a mixed population, unless its progress be arrested in time, is almost beyond belief; and the terrible fact of its too frequently, if not generally, masking its advance, as if the more effectually to mark its awful character, must in itself impress us with the extent of danger to which we are exposed from plague; but more especially during the fatal period when we are ignorant of its existence, and are combating it under other denominations. It is during this melancholy moment, that it insinuates itself even into the most secluded habitations, attacking individuals the most removed from public intercourse. Of this fact we have instances continually occurring in modern times, and this too plainly proves, that the disease, of which we are treating, is an enemy as insidious as it is dangerous. It consequently requires the most active vigilance to watch its progress, and to circumscribe the sphere of its operation within the most limited boundaries. Care and attention on these points would be at all times desirable, whether the principle, upon which the disease acts, be (as is falsely stated) pestilential effluvia, or whether it be a poison communicated by actual contact:—but with this fatal difference in the result. If the latter doctrine be admitted, the magnitude of the evil

may speedily be diminished by a strict and vigorous system of precautionary discipline:—if the former, there are no means, within the reach of human exertion, to ward off the impending danger, and to check the force of the disease. That such positive deficiency of preventive measures should exist, is not characteristic of that wise and paternal care, which marks all the other ordinations of Providence; and we cannot, therefore, but consider that, on this ground, if on no other, the doctrine is fallacious and untenable.

It is much to be lamented that, on a point of such vital importance to the whole human race, there should exist any difference of opinion: but it is, on the other hand, matter of congratulation, that we possess the means, by patient and dispassionate investigation, of setting the question entirely at rest.

The opportunities which have been afforded to British subjects to ascertain the true nature of plague, have been so numerous within the last few years, and the result of their practice has been, in some instances, so manifest, that all speculations upon the subject can be brought to the test of practical inquiry. We have the experience of four plagues, which have occurred under the dominion of the British flag, to refer to; and it is therefore to be hoped, that all theoretical reasonings on this subject, however

supported by ingenious sophistry and logical arrangement, will yield to the incontrovertible evidence of facts.

It is the experience which the writer has acquired during the prevalence of the plagues alluded to, that has alone induced him to offer his opinions so confidently on the subject. A practical knowledge of the force of pestilential contagion, arising from a long residence in plague countries, and from nearly six years practice, as chief of the health department there, during periods of absolute disease, may perhaps be considered as investing him with more than ordinary claims to attention. But should this not be conceded to him, there cannot surely be a fairer method of trying the soundness of the new doctrines, than by tracing how far they are borne out by the actual occurrences which took place, during the late existence of the distemper, in the British possessions in the Mediterranean: and for this purpose the writer proposes to give a History of Plague as it has lately appeared in Malta, Gozo, Corfu, and Cephalonia, having himself superintended the operations which were undertaken for its extinction in the two last mentioned islands.

CHAPTER II.

The Plague in Malta, always considered as contagious.—Brief View of the Plague of 1592—that of 1623—of 1633—of 1675.—Lazaretto first built in Malta.—The last Plague in 1813.—Introduced from Alexandria, by the Crew of the Saint Nicholas.—Its appearance in the Town of Valetta.—Public Places closed, and other Measures taken in consequence.—The contagious Nature of the Disease declared.—All Communication between the Shipping and the Shore prohibited.—Increase of the Disorder.—Its peculiar Character traced to be contagious.—Its Appearance in Citta Vecchia, Birchircara, and other Villages.—The Reasons for attributing the Source of the Contagion to the Crew of the Saint Nicholas.—General Distress throughout the Island.—Disease apparently diminishing, but afterwards increased by the plunder of infected Goods.—Its prevalence in Casal Curmi.—Arrival of his Excellency the Right Hon. Sir Thomas Maitland in Malta, and the Measures taken by him.—Casal Curmi walled in, and surrounded by Troops.—Consequent decrease of the Plague in other Parts of the Island.—General Pratique declared.—Observations, deducing from the preceding Facts Proofs of the specific Contagion of Plague.

IN tracing the progress of the different plagues which have ravaged Malta, from the sixteenth century to the last visitation in the year 1813, we

observe that, throughout the whole, one universal system of precaution has been resorted to, for the purpose of checking the course of the disorder. That system was the separation and interdiction of intercourse between the diseased and the healthy ; and, in proportion only as that system was acted upon, in its fullest and most decided form, have beneficial effects been known to result. Thus, from the earliest periods in which there has been any record in Malta of the treatment of the disease, even to the present time, the plague has been considered in that island as contagious.

The Count Ciantar, in his "Malta Illustrata," gives a very clear history of the introduction of the plague at four different periods into the island of Malta. The first was in the year 1592. On the 7th of May, in that year, four gallies, belonging to the Grand Duke of Tuscany, entered the port, to procure pilots acquainted with the navigation of the Levant seas. By permission of the Grand Master, Cardinal Verclula, a pilot was obtained ; when the gallies proceeded on a cruise along the coast of Egypt. In the vicinity of Alexandria, they captured a ship and a galley which had, a few days previous, sailed from that port, laden with flax and rice, destined for Constantinople, and having on board 150 Turks. On learning that the plague was raging at Alexandria, they returned to Malta with their prizes, which were discovered to have been infected,

and they thus introduced, for the first time, the plague into the island. This affliction caused a very considerable loss among the inhabitants, and continued until the following year.

The second contagion (as the author denominates it) occurred in the year 1623, originating in the house of Paulus Emilius Ramadus, guardian of the port. The disease soon spread to other houses, and four commissaries of health were nominated, who, without loss of time, sent the whole of the infected persons to the Lazaretto, and had recourse to other measures of a similar nature; so that the disease which threatened so much destruction, was overcome after the loss of only forty-five persons.

The third plague in Malta, according to the same author, took place in the year 1633, and broke out in a house situated over the Porta Maggiore, now called the Marina Gate, near to the situation, where ships from the Levant, at that time, usually anchored. The proprietor of the house having communicated with the crew of one of those ships, contracted the disease, and communicated it to one of his sisters, an inhabitant of the village of Zeitun. Shortly afterwards the disease attacked the whole of the family. Six commissaries of health were appointed, who directed the immediate transfer of the unfortunate family to the Lazaretto, observing every other necessary precaution for the security of the

public health, and, by prompt measures, the disease was immediately extinguished.

The fourth appearance of the plague in Malta, far more destructive than the preceding three, commenced towards the latter end of the year 1675. It increased considerably in the following year, and continued its ravages, in the most destructive form, during the space of seven months. Its origin was satisfactorily traced to the house of a shopkeeper of the name of Matteo Bonnici, where a child was the first victim of the disorder. The nature of the disease unfortunately was not suspected, and upon the death of the child, many neighbouring families went to condole with the unhappy parents. The immediate attack, with unequivocal signs of plague, of several of those who had thus assembled, roused the attention of the Grand Master, who deputed four commissioners of health to adopt such measures as the public safety demanded. The whole of those infected, with their susceptible effects, were sent to the Lazaretto; where, in a very few days, most of them perished. The contagion extending itself, in the month of February, attacked many inhabitants of the city of Valetta. Several apartments were, in consequence, built upon the small island, situated in Marsamuscetto harbour, for the accommodation of the infected persons. These buildings have been, from necessity, considerably increased since that period, and

have served as quarantine apartments, in which persons coming from infected countries are, to this day, secluded from general intercourse with the other inhabitants of the island, until the period of their quarantine is expired. The advance of disease required still further exertions, and a check to the further propagation of contagion was effected by that very system which, in the nineteenth century, we have been so strenuously maintaining. During the advance of plague at the time alluded to, we observe that not only a census was ordered of the population; but the number of houses, and the proportion of inhabitants, which each contained, was an object of investigation. This was not done with the view of mitigating the danger by diminishing any excess in the number of inhabitants crowded together in small dwellings; but it was for the purpose of enabling the deputies of health to ascertain the actual number of inhabitants, and to detect, the more readily, any attempt to evade the established orders. The town was divided in twenty-four districts, and each district was placed under the surveillance of twenty-four noblemen, and an equal number of citizens, or men of the second order, and a similar proportion of secretaries. The commissions thus formed, were called upon to visit every house within their respective districts, daily, to ascertain the state of health of the inhabitants, and to direct the arrangements

of the Lazarettoes. Unfortunately, a difference of opinion, as to the nature of the disease, arose among the members of the commission; the consequence of which was a want of due attention to the wishes of government, and a neglect in the separation of the infected and suspected, who were enclosed within the walls of the Lazaretto. To this neglect the spread of plague, at this early period, was justly attributed. The mortality, that resulted from the mistaken measures which were resorted to, was such as to call forth prayers, vows, and offerings, from the superstitious inhabitants to the shrines of their saints. Positive orders were issued for the transport of the sick to the Lazaretto, and to the Magazines of St. Elmo. The whole of the suspected were embarked at the expense of government on board of ships, appointed for the reception of both sexes, and stationed at the Marsamuscetto harbour, now the place for ships in quarantine. The success of this scheme unfortunately proved widely different from the general expectation which had been formed in regard to it; the instructions were either not adhered to, or if adhered to, were not enforced with sufficient vigor; or, perhaps, the system in itself was defective, as we only learn that the infected and suspected had been removed from amongst the other parts of the community, and both one and the other thus

removed, with scarcely an exception, fell victims to the disease!

In the terror excited amongst the persons segregated in St. Elmo, escape was not only meditated, but finally effected; and those who contrived to evade the vigilance of their keepers, only fled to disseminate more widely the fatal effects of the disease, ere they themselves became its victims. The consequences, as might be expected, were immediately and severely felt, the disease overleaping all bounds, and setting at nought every measure proposed and carried into effect by government, for the purpose of counteracting its influence. Indeed, such were at length the dreadful ravages of the disease, that the Grand Master was compelled to send to France for physicians, expurgators, and others, conversant with the treatment of plague. Upon their arrival on the 12th June, 1675, the whole population were forthwith confined to their respective houses, with the exception of the infected and the suspected, who were transferred to the Lazaretto. The result of this salutary measure was immediately felt, the victims hourly diminished, and a total cessation of the disease was announced on the 9th of August following. But before the course of the disease was stopped, destructive indeed had been its march; as, out of 60,000 inhabitants, which was the amount of

the population of Malta, at that time there died in the cities of Valetta 4,000, Burgo 1,800, Senglen 2,000, Burmola 1,500, and throughout the casals or villages 200 more, amounting altogether to above a sixth of the whole population of the island.

The fifth and last plague which afflicted the Maltese, although not so destructive as the preceding, was certainly to the full as severely felt: and we find that its progress could only be checked by similar means to those which had been adopted by their ancestors, more than 130 years before.

When Malta was suffering under the last visitation of plague, the extent of its population was unexampled, even by any period of its former history. The circumstance of the island being under the powerful protection of the British flag, had given an additional security to her ports, and the eligibility of her geographical position, being situated in the centre of the Mediterranean, had marked her out as the general resort for mercantile shipping, at the time, when, by the influence of the ruling Despot of France, all the continental ports in that sea were closed against British vessels. By this means the island very soon became the emporium of commerce in the Mediterranean. One of the most material branches of this commercial intercourse was the trade carried on between Malta and the Le-

vant, and the produce of the latter hourly appeared in her ports. In consequence of the frequency of plague, which, for centuries past had existed in almost every part of the Levant, the general quarantine precautions were invariably resorted to, and after due expurgation, both ships and cargoes were admitted to pratique in Malta.

In this state of mutual intercourse, perfect security had long existed; so confident were all in the persevering precautions of the health department. Unfortunately, however, as is too generally the case, the situation allotted for ships to perform their stipulated quarantine, was a perfect thoroughfare, being open to the constant passing and repassing of boats at all periods of the day. Under such disadvantages, it is but just to conclude, that, there existed a possibility of the utmost vigilance being evaded*.

The public authorities were thus resting upon the general and long established measures of security, and the plague at the same time raging

* Amongst the many important regulations enacted since the plague of Malta, to ensure the public health of the island, against the introduction of contagion, is the establishment of a separate harbour for the performance of quarantine, rendering the Lazarette and Quarantine Department of the island as efficient as any institution of this nature in Europe.

in the Levant, when the arrival of the brig, *St. Nicholas*, under the British flag, from Alexandria, on the morning of the 28th of March, 1813, called for public attention.

From the deposition of the Captain (*Antonio Maria Mescara*) it appeared that two of his crew, which consisted of ten persons, had been suddenly seized, during the voyage, with violent symptoms of a pestilential nature, which suddenly terminated their existence. The ship, on her departure from Alexandria, was furnished with a foul bill of health, that is to say, a declaration from the British consular office, of the actual existence of plague in that city. On the same day, the brig *Nancy*, Captain *Roger Patison*, entered the port of Malta, from Alexandria, with two of the crew labouring under very equivocal symptoms, generally believed to be plague; she was also furnished with a foul bill of health. Further, on the same day, the Spanish polacca, *Bella Maria*, Captain *Stefano Lucuyer*, also arrived from the same place. The Captain of the *Maria*, in his deposition taken at the Health Office, stated that he had lost one of his crew from plague, previous to his quitting Alexandria; all these circumstances establishing the truth of the consular statement.

The continuance of the *St. Nicholas*, in the port of Malta, excited considerable alarm amongst all classes of inhabitants, not only on

account of the doubtful character of the deaths which occurred on her passage, but from the nature of her cargo, which consisted of flax, being, from its susceptible nature, in the highest degree dangerous. In addition to the usual precautions adopted on similar occasions, public measures of increased rigor were immediately resorted to, all arrivals from the Levant were placed in the strictest quarantine, and on the 29th of the same month, the Captain and crew of the St. Nicholas were transferred to the Lazaretto, and the ship was placed under the immediate charge of health guardians.

The danger attendant on the detention of the St. Nicholas, in the port of Malta, as far as it exposed the public health and safety, to very imminent risk, was taken into consideration by the competent authorities at the time.

During these deliberations, the Captain of the St. Nicholas was taken ill, with all the symptoms of plague upon him. This took place on the 1st of April, and on the following day, the sailor who attended him, was attacked with similar symptoms. On the 7th both died, and on an inspection of the bodies, no doubt remained as to the nature of the disease.

These unfortunate events, determined the government to send the St. Nicholas back to Alexandria, and she sailed on the 10th April for that port, under the escort of His Majesty's Brig Badger.

The public mind was now somewhat tranquilized; the apartments occupied by the infected, were reported to have been duly expurgated, and the precautions that had been adopted, were generally believed sufficient to ensure safety.

Unhappily for the country, at the moment the public were thus indulging themselves in the fond hope of security, this insidious disease was insinuating itself in every angle of the city, in places remote from the scene of its first appearance, laying firm hold of, and marking with undeniable symptoms, its unhappy victims as it advanced in its course.

Its first assault was on the person of the daughter of a shoemaker, who resided in Strada St. Paolo; she was attacked on the 16th of April, and was attended in her illness by a physician of high respectability; and although the symptoms were violent, and death followed in a few days, it does not appear, that, at the moment any suspicions were excited as to the nature of the disease; insomuch that the customary church services were performed over the body, and it was buried in the accustomed manner. A few hours after the death of the daughter, the wife of the shoe-maker was attacked with a high degree of fever, accompanied with violent head-ache, vomiting and giddiness quickly succeeded by abortion. The fact of the patient complaining of pain in both groins, produced, for the first time,

alarm in the mind of the attending physicians ; a consultation was resolved upon, and after minute examination, the medical gentlemen consulted, were of opinion that the disorder was of a highly suspicious nature, and recommended an immediate report to that effect to government.

The knowledge of the state of health of the crew of the *St. Nicholas*, the doubts that had consequently arisen, and her vicinity to the shore, were strong reasons for alarm. On the 3d of May the symptoms were still more alarming, and on the 4th, the Committee of Health, in an extraordinary session, reported the public health to be in imminent danger. About this period the wife of the shoe-maker died, and on the evening of the same day, the body was examined by several professional men, and the original report was confirmed.

This event had scarcely occurred, when the shoe-maker himself was taken ill ; upon the knowledge of which, and the general suspicions of the nature of the disease, most of the inhabitants were thrown into the utmost consternation ; alarm spread itself every where, and flight was not only meditated, but in numerous instances carried into effect. The streets and roads were crowded with carts, conveying the baggage of many families hurrying to the interior ; whilst the sea-faring people were betaking themselves to their ships. Those accustomed to

similar scenes in the Levant, as well as the English generally, and the most prudent part of the natives shut themselves up within their respective residences.

An embargo was at this time placed upon all ships and vessels of whatever description. Government justly deeming such a measure necessary, until the nature of the disease was satisfactorily ascertained. Commerce was, as might be expected, at a stand, and the merchants were compelled to enter into special regulations for the security of their general interests.

On the 5th, Government, by a public edict, informed the inhabitants of the strong suspicions which were entertained, that the disease of which the persons before-mentioned died, was plague, directing the immediate shutting up of the courts of justice, the theatre, and every other place of public resort : and that the duties of the respective officers of Government should be exclusively confined to those measures, which were absolutely necessary for the furthering of the public service. At the same time, the city of Valetta, with its suburbs, and the three cities, Vittoriosa, Senglea, and Cospicua, were placed under medical observation, and other precautionary regulations were put in force.

On the same day, also, the report of the physicians, after the most accurate examination, stated that there did not exist a case of suspicion

in the whole island, with the exception of the before-mentioned shoe-maker, Salvatore Borg, who had been transferred to the Lazaretto, and on whom symptoms of plague were manifest.

It may not be irrelevant to the subject to notice in this place, a paper drawn up by the principal medical officers of the garrison of Malta, formed into a committee at the request of Deputy Inspector Green, upon the first appearance of plague, which document was printed by authority, and recommended to the notice of the public.

The very first regulation, to which the medical officers called the attention of the inhabitants, in this document, implied the contagious character of the disease : it was the following :

“ That one individual only from each healthy
“ and unsuspected family, be appointed to go
“ to market ; who is to avoid as much as possible every kind of contact, direct or indirect, with any person in the market, or in
“ any other place.”

This paper bears the signature of nine professional gentlemen, of high character, and long experience, and certainly, so long as absolute seclusion was not put in force, it was the most salutary advice that could be offered ; the language made use of is sufficiently decisive, and plainly shews that this body of medical officers

were, from the first moment, firmly convinced that the disease was plague; and, under this impression, there did not exist a doubt, as to the mode of its propagation, as solely and clearly depending upon contact. The means of prevention were, therefore, most judiciously declared, to rest upon the simple principle of avoiding the cause.

On the 6th of May nothing new occurred; yet all was alarm and confusion. On the 7th, further regulations were published: amongst the more particular of which, were the prohibition of all communication between the crews of the ships and the shore, the establishment of the means of supplying the shipping, prohibiting the sale of susceptible articles, and recommending to the inhabitants to avoid (as suggested in the document above alluded to) as much as possible all communication with each other. On this day many cases of suspicion were reported by the physicians to the Board of Health. Until the 19th, the advance of the disease was slow, and many even began to doubt the existence of plague in the island.

Dreading the dangerous consequences of such impressions on the public mind, Government published a short account of the plague of Messina, the principal object of which publication was to demonstrate to the people of Malta the destructive results which had been produced in

that city in the year 1743, by an unwillingness, on the part of its inhabitants, to believe in the true character of the disease, and also to shew the fatal effects of that security, into which the inhabitants of Sicily had allowed themselves to be betrayed, from the circumstance of the mild manner in which the disease advanced, judging from the few victims it had seized for the first thirty or forty days. But it is notorious, that the more insidious the first commencement of plague, the more destructive is its ultimate progress; and this truth the Government of Malta very properly considered, that they could not be too urgent, in pressing on the conviction of its inhabitants, under the alarming dangers with which they were threatened. How unhappily prophetic this warning of Government was, and how true this dreadful malady was to its general characteristic, is fresh in the memory of us all! Melancholy, indeed, would be our lot, if we should ever be called to witness this disease in our own country, unless we are properly prepared to meet the crisis, and to act up to every principle of precaution, with the most determined energy. Let us bear in mind, that a disease thus commenced, scarcely noticed in its origin, swept away more than one-twentieth of the inhabitants of one of the most populous islands under the British crown.

Scarcely had the publication above alluded to

been in the hands of the inhabitants of Malta, when several cases of plague were announced in different parts of the town, and in every instance, intercourse and communication were discovered to have taken place between the individuals attacked and those previously declared to be infected. The father and son of Salvatore Borg were amongst the number; the former died on the third day of the disease.

On the 16th the disease began visibly to increase, assuming in its nature a most terrific aspect, and offering the most unequivocal proofs of plague; many deaths were announced, and it now appeared that contagion had every where insinuated itself, but more particularly in the streets called Reale, St. Christoforo, St. Giuseppe, Pozzi, and St. Giovanni.

Such was the advance of plague in the capital of Malta. To the evils of increasing disease and mortality, was added a general terror, inso-much that the common measures of safety, such even as the transfer of the infected and suspected, to established depôts directed by Government, were considered by the inhabitants as an accumulation of misfortune, and every attempt at evasion was in consequence resorted to. These incidental evils did but aggravate the advance of disease, so much so, that on the 17th it became greatly alarming, dilating itself through the medium of communication, to the remotest

part of the city. Government deemed it expedient to direct, under the penalty of death, all heads of families to make an immediate report to the Board of Health, or to persons deputed by that body, of the slightest appearance of sickness in their respective families; and concealment on the part of any individual, of an age liable to the penalty of the law, was made a capital crime.

At this period of the disease, we do not notice that the *grades* or classification of the suspected had attracted any serious attention, although we observe that suspicion attached to the relations of such as were attacked with plague, and these were removed to places of security; and we trace from public documents the attack of many of these near relatives, who, from motives of precaution, had been separated from their kindred, either on account of their labouring under actual disease, or from other causes of suspicion. It does not however, appear, that this principle of suspicion, as it regarded relatives, was confined to those who resided either in the same house or vicinity; but it extended even to distant habitations in the town, such habitations, from the general intercourse that still existed, being the probable refuge of contagion.

We here also observe, that whilst the immediate but unconnected neighbours escaped disease, all those who had directly communicated

with persons labouring under the distemper, however remotely situated, were unhappily its first victims. It was this intercourse which laid the foundation of those evils, which ultimately overwhelmed the unfortunate people of Malta, the parent carrying disease to his unsuspecting family, and disseminating it alike to his unsuspecting neighbour.

In bringing forward this partial account of the origin of the plague of Malta, deduced from official documents, it will be evident that we have only had in view, as has been before noticed, the advancing of further proofs of the form in which that disease usually intrudes itself, as well as the maintaining, by further facts, what has been so frequently dwelt upon, as to the peculiar character of plague. In this instance we have it clearly in view, that the malady displayed itself by an uniform and faithful progress, and by a close and connected adherence to its true characteristic.

Had the disease which so severely afflicted the inhabitants of Malta, originated in an infected atmosphere, it would have naturally assumed a far different aspect, and its course would have been widely opposite to what is known to have occurred. Its assaults, instead of following fathers, mothers, husbands, wives, brothers, children, first and second cousins, and all other persons connected by relationship, to their different

habitations in every part of an extensive capital, would have been visible on the right and on the left, whole streets and districts contiguous to the place where it first manifested itself, and consequently alike exposed to its influence, would alike have felt its power. That this was not the case, is evident beyond doubt. The public records fully prove that the first attacks were at very opposite parts of the capital, slow in their progress, and the faithful followers of absolute contact traced to parental and friendly intercourse.

To this same cause must be attributed the introduction of disease into the interior, for we find it very early manifesting itself in Citta Vecchia, which is situated in the very heart of the island. Five persons were attacked in that city with unequivocal symptoms of plague on the 21st May: in this slow manner did the plague advance throughout the interior of the island, every day developing fresh cases in the villages; they were straggling cases, it is true; but that they were sufficient to prove the early introduction of contagion into these communities, will not be questioned, as we distinctly trace these partial occurrences of disease to have resulted from undoubted connexion with the infected inhabitants of the capital.

The introduction of disease into Bircharcara, was truly alarming, as it was one of the most

populous country towns in the island; the inhabitants of which were increased in number by upwards of three thousand fugitives from La Valetta on the first appearance of the plague there. Independently of this melancholy addition to the accumulating evils, several other villages were at the same time announced labouring under disease.

The warm season was now rapidly advancing, the thermometer having risen several degrees at the latter end of May; and, unfortunately, through the superstitious prejudices of the natives, considerable dependance was placed upon the anxiously looked for alteration in the state of the atmosphere; every day was consequently expected to diminish the danger. This belief was too generally inculcated, not to be productive of much mischief; as most persons assured themselves, that, if they could avoid danger until the summer heats set in, the evil would cease, and that the justly dreaded disease would then die a natural death. The consequence of this unfortunate belief was fatal, and every person in the slightest degree acquainted with the nature of plague contagion, shuddered at the prospect before him. The freedom of intercourse produced by this blind confidence, led to a very general contamination; and man, every where exposed to the baneful influence of plague, be-

came the active agent of its dissemination throughout the whole island.

The introduction of the evil into Malta, however it may have been questioned, can be as satisfactorily accounted for as its subsequent spread; it was, as will be shown, solely owing to the original and justly excited alarm produced by the St. Nicholas.

For, 1st, we observe that the plague broke out in the house of the shoemaker of the name of Borg, in Valetta, a man who, it was known, placed little dependence upon his trade, chiefly relying upon his speculations as a smuggler, for his subsistence.

2d. Immediately after this event it attacked the child of the master of a wine house, in a place contiguous to the quarantine harbour, the resort of persons of the character of Borg, and where the very under servants of the health office, who had charge of the St. Nicholas, were accustomed to retire.

3d. Some of the health guards of the St. Nicholas were amongst the first attacked.

4th. The health guards thus attacked, had been in the habit of dealing with Borg, and selling to him articles which they occasionally received from on board ships, sometimes as presents, sometimes as speculative purchases.

5th. The persons who were next and in succession attacked, were those who had made pur-

chases of susceptible goods from the shoemaker Borg, and who themselves traced their disease to this very source.

Lastly. The situation of Sliema, the residence of the proprietor of the wine house above mentioned, was too conveniently calculated to favour smuggling; as at the period alluded to, that or any other similar transaction might have been effected there, even without the knowledge of the under servants of the quarantine department.

From all which it is certainly but just to conclude, that the generally received opinion is but too true of Borg's having clandestinely received infected goods from the St. Nicholas.

Many who are of a contrary opinion on this subject, have laid much stress upon the safe arrival of the crew that had been sent on board the St. Nicholas, in the harbour of Malta, for the purpose of re-conducting her to Alexandria, and the subsequent unloading her cargo at that port, without the slightest appearance of disease amongst any of the persons so employed. It has, on this account, been contended that the origin of the plague of Malta was owing to other causes than the recorded sickness of the crew of that ship, and the previous contamination of a portion of the susceptible effects belonging to her.

But this argument is calculated to carry with it very little weight when the *modus operandi* of

the specific contaminating power or the *virus* of plague is duly considered.

It is scarcely to be presumed, although contaminated goods existed on board, and after some time produced disease amongst the crew, that the evil would be capable of spreading itself like wild-fire to a cargo, stowed and confined as that of the *St. Nicholas* was, within the ship's hold, and with which the crew could have had no possible connexion. This must have been the case had the crew, sent on board at Malta, or the persons subsequently employed in discharging the cargo in Egypt, been infected ; every precaution having been resorted to, in order to ensure the safety of the persons embarked as mariners ; the clothes of the former crew, and all susceptible articles, unconnected with the cargo, having been previously removed to the Lazaretto.

The infected portion was evidently unconnected with the general cargo ; being conveyed within its own particular covering, it could not have been suspected, and was therefore received on board, at the moment, with the most perfect safety and confidence, developing disease during the voyage, from direct communication with the contents of such contaminated package ; without which it must have continued in its unoffending form until some future period, when man would become the organ of its dissemination. The

event proves the fact, and this is the law which ever has been found to govern, and ever will govern, the disease of which we are treating.

What has been here noticed of the plague of Malta, will, it is hoped, be considered as perfectly sufficient to support all that has been hitherto advanced, as illustrative of the nature and general progress of this disease. Its destructive advance, in the island we are speaking of, is pretty generally known, at least, to all within the Mediterranean, as alarm was kept alive in the neighbouring countries for a very considerable time.

The ultimate eradication of the disease is equally understood to have resulted from those measures which we have so strenuously endeavoured to advocate; and which, as will appear when treating of the plague in the Ionian Islands, are alone adequate to the critical nature of the emergency.

It might have been expected that the dreadful consequences, attendant upon plague, would have formed a more leading feature in the commencement of this work; but we have refrained, as much as is consistent with the object in view, from entering too minutely upon a subject, so forcibly calculated to harrow up our feelings.

It may here, however, not be improper, before proceeding further in the history of the fatal disease of which we are treating, to take a view

of the melancholy consequences of the plague of Malta ; as should we ever be called upon to witness a recurrence of this disease, in all human probability, the portrait in the origin will be the same ; unless, indeed, there shall be sufficient decision and energy to act up to those principles which can alone be acknowledged as sufficient to counteract the evil, and upon which alone any dependence for our ultimate security can be placed.

From the commencement of the plague in La Valetta, Fort Manuel was assigned as a depôt for all those who fell under the suspicion of being infected. The situation of the fortress, offering extensive accommodations contiguous to the Lazaretto, built upon an airy and isolated piece of ground, easy of access, from its vicinity to the city and its suburbs, rendered it a situation most desirable for this object.

Unhappily, towards the latter end of June, the hospital of the Lazaretto was incapable of admitting more inmates ; consequently, all those subsequently attacked, so long as there was space left at Fort Manuel, were received at that establishment ; which, in a very short time, changed its general aspect, and became the *focus* of disease. Here the sick of both sexes, and all ages, together with the suspected, were hourly crowding ; and the scenes of terror, disease, and mortality, can better be imagined than described. Increasing mortality, and the dread of want,

produced the most distressing feelings amongst every class of the inhabitants, heightened by the hourly passing of the dead cart, driving with all the rapidity that its encumbered state would permit*.

This distress was still further increased by the daily intelligence of the loss of the dearest friends and relatives. These scenes were not confined to any particular part of the town or its suburbs, but alike extended to every street, lane, and alley; the transfer of the sick, the dying, the dead, and the suspected, being an hourly occurrence, and an object of constant contemplation. Alarm every where prevailed. Self-preservation was the only acknowledged law, and all alike dreaded their fellow creatures.

“ Dependents, friends, relations, love himself,
Savag’d by woe, forgot the tender tie,
The sweet engagements of the feeling heart.”

THOMSON.

In what has been here stated, let the writer not be accused of exaggeration; scenes have been painted to him, by eye witnesses, of a yet far deeper shade; but it is unnecessary to excite the

* The humane measures adopted by the government, and assisted by the richer inhabitants of the island, for the maintenance of the poor, at this distressing period, proved, not only efficient, but formed an important æra in the history of the plague of Malta.

feelings of the reader by a detail of these lamentable sufferings. The writer has himself repeatedly witnessed similar occurrences; and in still more distressing forms:—the impressions which they left upon his mind can only cease with existence.

Plague, in whatever light we view it, we must consider as the most afflicting of all human calamities; striking at the very root of our best affections, and severing the dearest and most sacred of our social ties; paralyzing every public measure, impeding every branch of commerce, and at once wounding, in the most deadly manner, our best, our dearest interests.

The decline of disease in Malta is justly attributed to the several measures of government; but, more strictly speaking, it was owing to those very marked measures which were ultimately resorted to, as we find that so soon as seclusive separation, and due classification were rigidly enforced, this all-dreaded and annihilating monster shrunk within himself. Yet, although the necessity of the due enforcement of this system was finally and fully recognised, we observe that, notwithstanding all the precautions adopted, evasion occurred on the part of those, who are ever ready to profit by the general consternation that they see around them, and to convert a public calamity into a means for furthering their own private and nefarious ends.

By the early plunder and concealment of infected goods, disease was kept alive in many parts of the Island of Malta; and the unhappy wretches, thus offending against the community, became daily sacrifices to the wrongs they had committed; but not before they had added to the catalogue of their crimes, by an hourly and wide diffusion of the poison, of which they themselves became so many vehicles.

Thus was the plague clandestinely disseminating itself, lurking in every corner of the island, bidding defiance to every previous exertion, when on a sudden that arm was raised which, under Providence, was destined to crush the desolating foe. Nor was the conquest an easy one. Casal Curmi boldly contesting, inch by inch, every effort which was made for the destruction of the disease.

The fatal determination which was apparent on the part of the inhabitants of that casal, to set at nought every order of government, kept alive disease; nor were the inhabitants singular in this determination; for it will be hereafter seen, that the very same fatal conduct was followed up, and produced nearly the same effects in many of the villages in the island of Corfu. The disease did not, in any of these places, yield in the smallest degree, until the most decided measures were resorted to.

In Casal Curmi the plague for a long time

bid defiance to every exertion, and its long continuance there, favoured the belief that its duration depended upon the constitution of the air.

The obstinacy of the disease, the evils to which it exposed the island from lengthened quarantine, and the intervention of other causes, are circumstances of too public a nature not to be generally known, as well as the extraordinary means resorted to on that occasion, in order to guarantee the public safety.

The arrival of his Excellency the Right Hon. Sir Thomas Maitland, in the capacity of Governor of Malta, which took place on the 5th October, 1813, formed, as we learn from the events that speedily followed, and, as we have just noticed, a particular æra in the history of the plague of Malta: for we find (and it must be noticed with feelings of gratitude as well as of admiration) that the progress of the disease was every where arrested by the decided and energetic system established and enforced by his Excellency; and the inquiries immediately set on foot, as to the causes of the protracted evil, could not fail to be otherwise than decisive.

The result of these inquiries, as might be expected, happily for the general welfare, was as satisfactory as it was conclusive; shewing in the clearest manner that disease was fostered and kept alive from the hourly intercourse with infected goods, on the part of many of the mis-

guided inhabitants, plague having been widely disseminated amongst the unfortunate people of this casal. The dread of the sacrifice of this property to the public safety, induced at an early period many families, amongst whom plague had made its appearance, to secrete the most valuable part of their susceptible effects; and, as will naturally be believed, from the circumstances under which the goods were secreted, the most, if not the whole, of them were contaminated.

The gradual and total extinction of many families has been clearly traced to this unhappy cause; and it has also been ascertained, that the seeds of disease, in this particular casal, were thus preserved for so harassing and lengthened a period.

The knowledge of the above circumstance compelled his Excellency to have recourse to the novel and extraordinary plan of converting a populous country town into a species of lazaretto, shutting the inhabitants within their own precincts, by the erection of double walls, and by the establishment, without these walls, of cordon over cordon.

We have heard that it is a difficult task to effect circumvallations, so as to secure an enemy within his citadel, and we know that efforts to this effect have failed, under some of the greatest captains of the Grecian æra, of which Plataea was

a memorable example; and principles, not very dissimilar, have been resorted to in modern warfare; but we have nothing on record of any such arduous attempt being made against the formidable enemy we are now treating of, previous to the walling in of Curmi. So effectually was this work performed, that all danger was speedily at an end, retreat was rendered impossible, and the natural consequence was, as it ever must be under similar measures, that the disease was confined within its walls, where it was treated with a rigid and watchful eye; but, at the same time, with the most humane attention to the wants of the community. The depôt from whence so much evil sprung, being gradually discovered, and general expurgation being established, a termination was very soon put to those dangers that had so long, so seriously, and so justly alarmed the island.

Here we again observe that, as soon as the cause of particular disease was discovered and removed, all dangers ceased; and that, although the germs of the plague were not entirely extinguished for a considerable time in this casal, there was not an instance of any of the troops employed on that service having suffered. If this is not characteristic of specific contagion, we must confess ourselves at a loss for an appropriate term to apply to this disease.

We know, and it is here again distinctly

before us, that contagion is the most implacable of all enemies when allowed to stalk abroad; and in admitting thus much it will be equally acknowledged that, when under proper control, it soon becomes not only manageable, but comparatively innocent.

That there was good reason for his Excellency's recurring to the strong measure, now alluded to, will appear from a perusal of his Excellency's proclamation of the 4th December, 1813 (see Appendix A.), and will equally substantiate what has been already said as to the cause of the duration of the plague, in that unfortunate casal.

His Excellency distinctly stated the true causes of the continuance of plague in Casal Curmi to be the stealing of infected goods from infected houses, and the secreting from the vigilance of the police, by those unhappy individuals attacked with disease, such articles of property as had through their means become infected. His Excellency then proceeds to declare Casal Curmi to be out of the king's peace, and to establish a military commission in that casal for the purpose of carrying martial law into execution. The forcible language used on this occasion, and the decisive measures resorted to, appear to have had the desired effect of intimidating the inhabitants from any further infraction of the quarantine regulations, as it is certain

that the proclaimed law was in no one instance put in force.

From the period that Casal Curmi was inclosed, we notice, by the public documents, a series of able and decisive regulations emanating from his Excellency the governor, and enforced with the most zealous attention to the interests of the inhabitants, the very perusal of which afforded, even to the timid, the fullest confidence in the speedy termination of sufferings, in every sense the most poignant.

The labours of the king's civil commissioner, Lieut.-Gen. Oakes, under circumstances the most trying, were acknowledged as deserving the highest encomiums and admiration, and the zeal of many respectable inhabitants (as noticed in Sir T. Maitland's proclamation on assuming the government), from the commencement of disease was laudably conspicuous; yet, with all these advantages, the annihilation of disease was reserved, under Providence, for his Excellency, and under similar circumstances the like event occurred at Corfu.

The rapid decline of disease, which marked every step that was now taken, enabled his Excellency to look forward to the early pratique of the island: and with a view of ascertaining the actual state of things, a general purification was directed by proclamation under date of the 13th of December, 1813 (see Appendix B.), to take

place in every town and district, and with a very partial exception the purification extended to every house, store, or magazine of whatever description, throughout the island.

Although in the very midst of confidence arising from the evident diminution of plague, yet we find the measures of public security, if possible, more rigidly enforced; and unquestionably with prudence, as the public danger was thereby for a time materially increased.

Upon the happy termination of this important duty depended the commencement of the clean quarantine of the island, the ill-fated Casal Curmi excepted.

It appears, such was the zeal with which this dangerous service was performed, that it exceeded the most sanguine expectations, enabling his Excellency to proclaim the commencement of clean quarantine* the latter end of Decem-

* Foul and clean quarantine have been established, during the actual existence of plague, by early custom in most parts of Europe where this disease has made its appearance; which implies, that all persons who have been removed from society in consequence of their labouring under plague, or for having communicated with persons under disease, shall be subjected to twice forty days quarantine, the first being denominated foul quarantine; and should plague make its appearance amongst the persons thus shut up, the number of days they had been confined antecedent to such case or cases of plague cease to be counted, the quarantine of the non-infected

ber, and so favourable was the general state of health, on the 7th of January following, throughout the island (Casal Curmi and the lazaretto excepted) that all restrictions regarding the capital were removed ; on which day the courts of justice resumed their legal proceedings. - The removal of restrictions in the interior, with the exceptions above-mentioned, speedily followed, and thus, on the 27th January, general pratique was established, no doubt remaining on his Excellency's mind of the " perfect and permanent " suppression of the plague."

How does all this favour the doctrine of the infectious character of plague? .

We notice,—and let it be particularly borne in mind, as leading to a positive conclusion,—that so soon as the plague was confined within walls, as it was in Casal Curmi, all anxiety about any further danger was at an end; and although the plague was in the very heart of the country, it produced no more dread or alarm than if no such disease existed. No precautions whatever were thought of without the cordons, and we find the result was precisely such as might naturally be expected under similar circumstances.

commencing only on the day of the last case of plague amongst them ; precautions now ascertained to be unnecessarily severe, not less militating against the individuals than the public.

This is perfectly consonant with the true principles of plague, but very dissimilar indeed to the recently advanced doctrines—doctrines totally differing from the law which conducts the contagion of plague, its specific character accompanying us, step by step, as we unfold its history and trace its progress.

In marking the general course of this malady, we cannot but observe the extent of danger to which a community is exposed upon the first introduction of plague amongst them, and this may not unfrequently be attributed to opposite opinions, entertained relative to the true nature of this disease, as well as the support given to those different views of the important question at issue by the leading members of that community. This is a subject of the deepest interest to the public, as in many instances it materially tends, although perhaps unintentionally on the part of such individuals, to counteract the best efforts of government designed for the eradication of disease: as it must follow, that a large proportion of the mass of society will frequently be found to be influenced by the opinions of their superiors, to whom they have ever been accustomed to lend a submissive ear.

To a want of belief, on the part of some of the principal inhabitants of the casals, of the actual existence of plague (a report, which we find from official documents, had been industriously

circulated throughout many parts of the island) and to a difference of opinion amongst several of the residents of Valetta as to the true character of the disease, with which the island was afflicted, must be attributed many of the evil consequences that ultimately resulted.

Had the disease, however, been met on its first appearance with all the rigour of quarantine regulations, the difference of prevailing opinions as far as they regarded name, would have availed little ; and it is more than probable, the disease, under such discipline, would never have penetrated into the interior. Barriers, well and timely erected, would inevitably have confined the disease ; but the people of Malta were at that period unschooled in plague ; they have now, alas ! been tutored by sad and dearly-bought experience.

It is worthy of remark that, whilst many of the inhabitants of Valetta and of some of the casals, were, after the first alarm had subsided, wrapped in fatal security, unapprehensive of any dangerous result, the inhabitants of the three cities Vittoriosa, Cospicua, and Senglea, were more alive to the true consequences of the evil, and under this alarm immediately set about concerting measures for their own safety.

The city of Valetta was at the time alluded to in open communication with all the other parts of the island, of course, excepting the laza-

retto. The inhabitants of the three cities above-mentioned, jealous of their safety, and impressed with the conviction that contagion was abroad, had recourse to the bold step of cutting off all communication with the capital, and for a time, even government officers, under the seal of authority, were peremptorily denied a landing by the populace of Senglea*.

It is not for us to enter into the propriety of this measure, it is sufficient to record the occurrence as an absolute fact, and to state that, at a period of general danger, it saved the inhabitants who resorted to it. The population of these three cities exceeded that of the capital ; and yet, notwithstanding all this, we are told by the author whom we have already quoted, that the plague of Malta originated in the lazaretto of that island, from whence it was carefully conveyed through the air (its proper circulating medium, according to his notions) to an obscure dwelling in Valetta, seeking its victims in an equally obscure manner ; where, unsatiated, it subsequently directed its course to the casals.

* This difference of opinion, as to the nature of the disease, the author is induced from inquiry to attribute to the circumstance of the three cities being very generally inhabited by ship proprietors and sea-faring persons who had passed much of their time in the Levant, and were, consequently, no strangers to plague, or the consequences of that fatal malady, to a population in open communication with each other.

But if we look for a moment to the relative situation of these places, we shall find that the distance from the three cities of Vittoriosa, Cospicua, and Senglea, to the capital, Valetta, is very little more than the distance from the lazaretto to the capital, and very considerably less, indeed, than that of any of the casals which were attacked with the disease : and again, the distance from the capital, where the disease broke out, to the three cities, is not more than half a musket shot, whereas Citta Vecchia, the place next attacked after Valetta, is distant from the latter about five miles. It must also be further observed, that the winds prevailing at the time when disease became disseminated, exposed the three cities, much more than any part of the interior : should not these circumstances alone, induce us to infer that if the air be the agent by which plague is diffused, the three cities would be amongst the first to feel its fatal effects ? That the advance of epidemic diseases is in some instances attended with striking peculiarities cannot be questioned,—it is clearly evinced by the history of many of those fatal visitations,—but it is unnecessary to say that these peculiarities bear no reference whatever to the disease the subject of these pages ; nor can they in the slightest degree weaken our position relative to the manner in which plague is disseminated. However, to enter upon these peculiarities so

at variance with the plain and simple mode of contamination in the instance of plague contagion, would be so foreign to our purpose any attempt to elucidate this subject would be very unnecessarily intruding extraneous matter upon the attention of our readers.

Thus, then, the late plague of Malta offers in its progress the most irresistible proofs of the specific contagion of the disease, and in pursuing it to its close, we find its history still true to the same principle of action. Indeed, the ultimate success, which crowned the well-directed exertions that were used for its eradication, must be wholly attributed to its having been treated as a disease depending upon contagion, and upon contagion only, for, from the period when, as has been already noticed, all communication was finally cut off, and seclusion and separation strictly enforced*, both in the capital and the interior, an event which did not take place

* The very efficient and detailed regulations framed by order of his Excellency the Governor upon this occasion, and by which the inhabitants were not only segregated, but regularly supplied with every necessary of life, now form an important part of the police code of the Island of Malta, and such are the arrangements of the government of Malta on this head, that were plague again unfortunately introduced into the capital, the necessary restrictions for the safety of the population could be put in force within the space of a very few hours.

until the 5th August, when the daily deaths amounted on an average to forty-five, and the number of new cases of plague to about forty,—the mortality began most decidedly to diminish.

It will be recollected that the intercourse between the capital and the casals or country towns, had been for a considerable time free and uninterrupted, nor will the wide dissemination of disease that followed be forgotten, and we are borne out by official documents in the assertion, that in those instances where the prejudices of the people counteracted the views of government, the numbers who fell victims to disease, were, when compared with those who escaped, beyond all belief.

In no part of the island was this last circumstance more fatally verified than in Curmi; as we observe that the capital, and every other town and village, had been emancipated from quarantine restrictions and free pratique declared on the 7th of January, whilst disease continued, from the causes already enumerated, to afflict the unfortunate inhabitants of that casal until the 7th of March following, at which time it appears, by a proclamation from his Excellency on that subject (see Appendix, C.), it was at length finally eradicated.

CHAPTER III.

Precautions taken in Gozo, when Malta was suffering under Plague, removed.—Appearance of Disease in Gozo.—Clearly traced to Communication with Malta.—Infected Parts of the Island surrounded with Troops.—Death of Dr. Macadam, Physician to the Forces.—Eradication of the Plague in Gozo.

FROM the vicinity of the Island of Gozo to Malta, and the hourly communication maintained between both islands, it would not have been matter of surprise had the plague been introduced into Gozo upon its first breaking out in Valetta, or on its subsequent extension to the casals. But good fortune for a while appeared particularly to favour that island, and the inhabitants, upon the first alarm at Valetta, finding themselves free from disease, like the people of Senglea, determined to leave no precaution untried that could tend to avert the impending danger. Aided by every exertion of Government, the strictest measures were early resorted to, and all communication between the islands was subjected to the severest quarantine regulations. This island, during the whole period of the disease in Malta, enjoyed an uninterrupted good

health, and as they justly attributed their immunity from disease to the precautions adopted, they continued those measures which had guaranteed their safety without the smallest relaxation, until the happy hour that gave free pratique to Malta; when they received their neighbours with that confidence with which they were accustomed to meet them, previous to their falling under the fatal influence of plague, thus breaking down all those barriers which the happy issue of affairs had no longer rendered necessary.

Months had passed in perfect safety, and every recollection of the past danger had vanished, when, on a sudden, the inhabitants of Gozo were roused from their state of quiet and apparent security: the utmost alarm ensued. The plague was amongst them; the very name of which was sufficient, as the remembrance of the sufferings of the people of Malta had scarcely been effaced from their memories.

The history is short and simple; one opinion prevailed, and that happily the right one, as to the nature of the disease; no great danger was therefore to be apprehended, the more especially as its introduction was almost immediately traced in a clear and satisfactory manner, adding another to the numerous proofs already existing of the specific character of plague.

The disease, contrary to all expectation, was

imported from Malta; and the means by which it was imported, have been ascertained to have originated in one of those instances of the concealment of infected property, which we have seen too frequently recurred to by the lower orders under such circumstances; who, from ignorance of the fatal consequences positively attendant upon such acts, consider the regulations of an enlightened Government for the common good, as both vexatious and oppressive, and, actuated by this feeling, think it no crime to contravene them, notwithstanding the threats held out by the Government against such nefarious conduct.

The unfortunate individual, through whose means the plague was introduced into Gozo, and who himself fell a victim to the crime he had committed, (the enormity of which cannot be sufficiently characterized until the dreadful consequences attendant upon it are made known) was named Angelo Galen.

During the raging of the plague in Malta, this man was an inhabitant of Casal Curmi, and before that ill-fated town was invested with troops, and converted into a Lazaretto, (as has been already related), he concealed a box of wearing apparel in the neighbourhood. After the plague had terminated its destructive ravages in Malta, after the military guard, by which the casal was enclosed, had been with-

drawn, and all other quarantine restrictions done away with, Galen took the hidden box from the place where he had so carefully concealed it; and embarking with it on board a passage boat, departed for Gozo, of which island he was a native.—On the 22d of February, 1814, being two or three days after his arrival in Gozo, he died suddenly at his own house, in Casal Caccia; and as, during even the most virulent crisis of the plague in Malta, there was no suspicion of contagion whatever attached to the inhabitants of Gozo, his body was carried to the parish church, and he was buried with the accustomed funeral ceremonies.

On the 28th of the same month, Rosa, daughter of the before-mentioned unfortunate victim, felt herself ill; and as the symptoms, with which she was attacked, were of a violent nature, she was carried by her friends to the hospital of the island, near the capital, Rabbato, where she died in a few hours.

The inhabitants of Gozo began now to fear that the fatal disease, of the destructive effects of which, in the neighbouring island, they had lately been so well informed, but from which hitherto they had happily suffered nothing, had made its appearance among them. This fear was too soon and too unequivocally confirmed by the death, within a few days, of several in-

habitants of the casal to which Galen belonged; and among them the priest who attended him, and the person who assisted in his burial.

The true character of the disease having been declared, by a report made on the spot by medical practitioners, sent from Malta for that purpose, his Excellency, the Governor, with that vigour and promptitude which ever mark his public measures, immediately issued a proclamation, dated the 8th of March, 1814, (see Appendix, C.), in which he cut off all communication between the infected island and Malta, and established those general measures of precaution, which, to use his Excellency's own words, "the melancholy experience of last year in Malta, had shewn to be absolutely necessary, and without a rigid observance of which, a recurrence of the late unfortunate calamity was, under the present circumstances, much to be apprehended."

For the purpose of carrying more effectually into execution these restrictive measures, a strong detachment of military was sent to Gozo, to form a cordon round the infected parts of the island. Thus confined within circumscribed limits, the disease soon yielded to the salutary regulations, enacted so judiciously, and carried into effect so vigorously, by the Government. Its course, as might be expected, was speedily arrested, and absolutely confined to the village where it made its appearance; for we find, by the official re-

turns, that not more than ninety-six persons died of the disease, introduced as it had been among a mixed population, exceeding 15,000 souls. As one of this number the author notices, with regret, the death of his early friend Doctor M'Adam, physician to the forces, whose exertions were unceasing in the cause he had undertaken, but who unfortunately fell a victim to his want of belief in the contagion of plague.

It is a remarkable fact, and one that should serve as a beacon to others employed on similar services, that, of the many British medical officers, employed in the recent plagues that have occurred under the British flag, within the Mediterranean, the disbelievers in the long established doctrines of the specific contagion of the disease, were alone its victims.

The strict obedience of the inhabitants of Gozo, to the several orders of Government, and the alacrity with which they executed them, greatly favoured the public measures directed for their safety; and the diminished mortality, when compared to the number of deaths, from the same cause, in other places, offer the best practical proof that can be adduced of the efficiency of those measures which are founded upon the simple, but important principles of separation and seclusion—measures which can alone be successful in confining, and ultimately conquering the ravages of plague.

CHAPTER IV.

Sketch of the Plague in 1813, and 1814, on the Banks of the Lepanto and in Albania.—Treated as Contagious.—Flight of the Inhabitants from Livadia upon the first Appearance of Plague.—General Alarm throughout the Country.—Plague at Tripoli.—Overcome by the usual preventive Means used against Contagious Diseases.

AT the period that the plague was making such rapid strides in the Island of Malta, a similar visitation was committing direful havoc among the inhabitants of Albania, and the neighbouring coast of the Morea. The author was at that time attached to the quarantine department of the Ionian Islands, and his Majesty's Government despatched him to ascertain the true nature of the disease, which was then raging on the banks of the Lepanto. It was previously ascertained that the disease had been introduced into the town of Livadia from Zeitun, in Romelia, by the incautious conduct of one of the inhabitants, named Kalangi, who was taken ill the night after his arrival, and survived only two days. On the third day the wife of Kalangi was taken ill; and on the following day, the daughter was attacked, with similar symptoms to those of her

mother; and both died on the third day of the disease. The families of the neighbouring houses, the friends of Kalangi, were the next attacked, which excited considerable alarm; as it was well understood that many of the neighbouring towns were under the scourge of plague. Tornovo, a small town, about four hours* distant from Larissa, having been reported as nearly depopulated, and from whence it was ascertained that disease had been introduced into Zeitun, where sixteen families were, on a sudden, almost totally annihilated.

The knowledge of these facts induced the Governor of Livadia to retire to the village of Dystomo, about two hours distant from the seat of his government. General alarm was the consequence, and the whole of the Greek families, following his example, sought refuge wherever an asylum offered remote from the scene of terror.

On entering the country the author found the inhabitants every where dispersed: some were encamped in the open fields, many crowded to the neighbouring villages, the poorer classes securing themselves under the hedges, and thick foliage, which here and there presented itself, whilst the principal families retired to, and shut

* Distances in the Turkish territory are always computed by time.

themselves within the walls of the famed Convent of St. Luke. Unwilling to confide in the assurance he had received, of the perfect state of health of the new inhabitants of the convent, the author determined upon visiting them forthwith, and accordingly proceeded to that sequestered spot, furnished with the necessary orders for his admission, from the governor, addressed to the superior. On his arrival in the vicinity of that enchanting place, rendered interesting by the description given of it by Chandler, he found every approach closely guarded by armed peasantry ; and it was long, and after many interrogations and subsequent consultations between the prior, and the heads of the principal families, that the rude and heavy gate of that venerable pile was unbarred.

“ The sullen door,
Yet uninfected, on its cautious hinge,
Fearing to turn, abhors society.”

Thus it appeared, but happily it continued uninfected, that holy retreat having secured the refugees from danger, made still more secure by their having fled, ere contagion could be disseminated among them.

The town of Livadia, of no small extent, and very respectably populated, might be truly said to be deserted, as the author found it in the possession of a few Jews and straggling soldiers.

“ Into the worst of deserts sudden turned
The cheerful haunt of men.”

THOMSON.

The author had visited Livadia about two years previously, but under a very different aspect, and as he was acquainted with several of the principal inhabitants, he felt more than an ordinary interest in its fate. He followed the governor to his retreat, and his interviews with that chief and the principal physician of the country, became frequent during his short, and he may add, successful stay in that neighbourhood; as, fortunately for the whole community, these interviews terminated in the firm resolution on the part of the governor to enforce the rules of quarantine, in the strictest manner, to establish a system of expurgation for infected houses, and to cut off all communication between the healthy and the infected by means of cordons. Previous to the author's arrival, general measures of precaution were adopted, and such was the dread of the inhabitants of Dystomo, and such was their knowledge of plague, that it was with the greatest difficulty and force of persuasion, he could procure mules to return to Livadia, although ordered by the governor; and even then not until he had pledged himself to refrain from taking them into the town. For his re-admittance into Dystomo, he was absolutely obliged to negotiate, nor was permission granted, until he

had promised not only to avoid all contact, which, by the by, was not at all necessary to be exacted, but consented to be escorted by four of the governor's confidential soldiers, who rendered themselves responsible for the due fulfilment of all the engagements thus entered into.

The event of the system adopted was such as, in our most sanguine expectation, we could look for; although it wanted much of that precision which we subsequently learned from experience. Soon after the author's return to Zante, he had the satisfaction of knowing that the contagion was circumscribed, and the evil very slightly felt. Within a month from the last death, confidence was restored, and the inhabitants returned to their houses with perfect safety.

At Filiates, on the shore of Albania (where the plague was introduced nearly a year and a half subsequent to this latter event) the aspect was different; although the whole population was in a state of the utmost alarm. On the intelligence of the introduction of plague, none presumed to quit the scene of terror, as the Pacha had publicly prohibited the flight of any of the inhabitants of that unfortunate town, threatening those with death who attempted to violate the orders issued for the security of his territory; a measure doubtless dictated by wisdom, but demanding suitable arrangements for the safety as well as the various wants of all

classes subjected to these restrictions. It does not appear that even medical assistance had been granted. As the disease was thus conquered by fire and sword, we cannot suppose that much attention was paid to the general sufferings of the ill-fated inhabitants; suffice it to say, that whatever moral character may be attached to the measures taken, they proved effectual in eradicating the disease, and most decidedly succeeded in preventing its spreading beyond the small town where it broke out. The mortality, however, was dreadful, and its traces were evident at every step, the very streets being converted into cemeteries. The writer much laments that he did not reach that asylum of accumulated misery, in time to grant them that assistance which their stern ruler denied them, and of which the few survivors complained in the most emphatic terms.

In this sketch of the occurrences relating to the plague which took place in the years 1813 and 1814, on the banks of the Lepanto, and on the shore of Albania, we have an acknowledgment that contagion is the sole disseminator of the disease, even on the part of those whose religious prejudices have hitherto always taught them to look upon plague as an irrevocable decree, and to discountenance all attempts to restrict or confine its range. The first principle of self-preservation, although militating against the tenets

of the Mahomedan religion, has in these instances been acted upon with vigour, and has thus been the means of checking the progress of the plague, which would, most probably, without the aid of those measures, have extended its baneful influence throughout the whole of European Turkey. But it is not only in the southern parts of the Ottoman empire, that these rational principles are gaining ground; the strong instinct of self-preservation has burst through the hitherto impenetrable mists of prejudice and superstition in other parts of the Turkish dominions. In many of those states which are removed from the immediate control of the chief divan, or great council of the empire, and more particularly those which are connected by commercial interest with the European powers, the same principles have been avowed and acted upon. The inhabitants of Tripoli, on the coast of Barbary, have been secured from danger for a considerable time past, by the enlightened measures pursued by the present Basha, who has not disdained to avail himself of European skill, to preserve the health and security of his subjects. It is not more than four years since the plague made its appearance in the arsenal of Tripoli, but was effectually crushed within the very walls of the citadel, by the energetic measures of a British subject, Dr. Dickson. This fact becomes the

more important, from the very perilous situation in which Tripoli stands, both with respect to her external and internal relations; and more particularly the latter, as the neighbouring states on her frontiers are continually overwhelmed with the ravages of plague, and the disease is at the present moment advancing on all sides around her with rapid and depopulating strides.

Notwithstanding the clamour that has been lately raised against the non-contagion of plague, we hesitate not in concluding this chapter, by saying, that it must be the prayer of every well wisher to humanity, that the faint light which thus begins to glimmer through the dark shades of barbarism and superstition, may eventually become sufficiently brilliant to spread its benign influence over the whole of the eastern world, subjected to this direful scourge; that, directed by the torch of philosophic inquiry, it may ultimately conduce to the establishment, throughout Asia and Africa, of those enlightened systems of policy which distinguish civilized Europe, and thus be the means of saving annually, thousands and tens of thousands of human beings.

CHAPTER V.

History of the Plague at Corfu.—First appeared at Marathia, in the District of Leftimo.—Communication with the Rest of the Island cut off by a Cordon of Militia and British Troops.—Board of Health established, and general preventive Measures adopted.—Neighbouring Villages attacked with Sickness.—Cordon consequently extended.—Disease clearly ascertained to be Plague.—Death of Assistant Surgeon Torne.—Increase of the Disease.—Arrival of his Excellency the Right Hon. Sir Thomas Maitland at Corfu.—Important Measures directed by his Excellency.—Case at Perivole.—Separation and Seclusion of infected and suspected Persons proved to be the only Means of checking the Plague.—Detail of the various Measures founded upon this Principle which were acted upon.—Extinction of the Plague in Upper Leftimo.—Its appearance in Melicchia.—The Source of the Contagion traced to the Village of Potami, which had been previously infected.—Several Cases detailed.—Statement of the preventive Measures resorted to.—Its Extinction in Melicchia.—New Cases at Potami and Anaplades.—Total Disappearance of Disease in the Island.

IN proceeding to give an account of the plague, as it lately appeared in the Ionian Islands, it will be perceived that the author does not enter upon the subject with the ordinary feelings of a

medical writer, who merely examines what has passed under the observation of others, for the purpose of ascertaining how far the facts recorded are reconcileable to the known principles of the profession; but he speaks from his own actual and positive experience, having resided, he may say, in the very bosom of the disease from its first appearance, both in Corfu and Ceffalonia, until its total extinction in those islands, and the melancholy occurrences which he relates, passed under his own view.

In consequence of the intimate connexion of the writer with the transactions now about to be recorded, the official reports made by him at the time will naturally form the ground-work of the subsequent part of this publication; and, in order to preserve the authenticity of the several statements, the original form, in which these official communications were made, will be adhered to as much as possible, adding only such occasional passages as may be required to maintain an unbroken unity in the narration, and to render the work intelligible and interesting to general readers.

It was at the little village of Marathia, in the district of Leftimo, that the plague first discovered itself in the island of Corfu. On the evening of the 18th December, 1815, the justice of peace of this district made a communication to Government, that an alarming disease had

made its appearance in the village abovementioned, and that it was then raging with considerable virulence. It was further stated, that a large portion of the inhabitants of Marathia had already died under the influence of the disease, although no communication had been made to the public authorities on the subject by the primate or head of the village. This was the first information received by the Government, and his Excellency, Lieut.-General Campbell, the king's civil commissioner, was pleased immediately to refer to me on the occasion. A committee was in consequence constituted, of which I was appointed president, to investigate and report upon the nature of the disease.

Accordingly on the same evening I proceeded for Leftimo, accompanied by two of the principal physicians of the island ; but owing to the many difficulties that we had to encounter both by sea and land, although the distance did not exceed twenty miles, we did not reach our destination until the morning of the 19th, the gun-boat, on board of which we had embarked, having been driven on shore during the night in a heavy gale. At 12 o'clock we arrived at Marathia, the seat of disease ; and, after an anxious investigation, we found that a fever had broken out amongst this little community so far back as the 15th of the previous month, and that this disease had assumed a most malignant form ; thirteen,

out of a population of about fifty, having died. This was the sum of all the real information we could obtain, and from a people over whom ignorance and superstition seemed to reign with unbounded sway, it was with difficulty we could even obtain this. They attributed the whole of the evils, with which they were afflicted, to the agency of a spirit, being that of a man who had been murdered in the neighbourhood of the village some months before. They were confident that this was the true cause of their sufferings, and endeavoured to make every atonement to the angry spirit by means of church offerings, prayers, and processions. All who died, it was asserted, had been attacked either in the evening or returning from their field labours or during the night. They believed that the spirit inflicted punishment by stripes, and by efforts at strangulation, and that the terror excited in the minds of all those who were attacked, and the continued nightly persecution of the spirit hurried them from one extreme of agony to another until their sufferings terminated in death.

Nothing could equal the wretched appearance of the village, poverty with all its miserable train of attendants presenting itself to the view at every step. All that could be done for them at the moment was effected. We offered them every assurance of immediate assistance, in the mean time strongly recommending to them

cleanliness, and to avoid as much as possible all intercourse with each other.

In the different houses, where the disease made its appearance, there were few instances where any individual escaped. This was the state of matters upon my arrival, nor will it appear extraordinary that the existence of disease in the interior was so long concealed from the government, when the religious prejudices of the people, and the geographical position of the village are considered, as well as the circumstance of the inhabitants being inured to sickness, the autumnal remittent fever, which rages in this quarter annually, having from the earliest period been destructive to the population, and consequently to the general cultivation of that part of the country.

The village of Marathia is situated on a little eminence or ridge running along the southern extremity of the island, and nearly dividing it, looking towards both seas; on either side of this ridge, the ground runs into a flat, and stagnant pools and marshes every where present themselves. During the autumnal months, the remittent fever had been most destructive in this district, very few having escaped its attack. The season had been extremely mild, the rains set in earlier than usual, heavy but partial, and were followed by a long drought and heat unnatural for the advanced season of the year, the

thermometer being seldom below sixty-six, with a constant *sirocco*, or south-east wind.

Reflecting upon the nature of the disease, which presented itself for our examination, the poverty of the inhabitants amounting almost to absolute want, the natural unhealthiness of the whole district during the autumn,—considering also that these people had but recently recovered from the effects of a remittent fever which had been most severely felt in every part of the district, the village, although elevated, being nearly surrounded by marshes, inhabited by a peasantry wholly unconnected with commerce, removed from the sea-shore, and in the very heart of the district, no disease having been discovered in any other part of the island, all combined to impress upon our minds that the disease before us was the offspring of the soil; nevertheless, conceiving that it was not only of a malignant, but also of a contagious nature, we considered that it was that particular description of disease which demanded the strictest measures of precaution.

With this feeling we determined on the establishment of such restrictions as, in our minds, should entirely remove all apprehension of the disease extending itself beyond its original limits. The nature of the country, in some degree, favoured this measure, and Marathia was, in consequence, immediately invested, and cordons formed, extending from sea to sea, so as to cut

off all communication between Leftimo and the rest of the island, all of which was effected on the spot, by calling out the *cernedi*, or militia, of the neighbouring villages, and stationing them in several bodies at the different passes. This arrangement being completed, we sent orders to the primates of the different villages on the north of the river Messongi, prohibiting the inhabitants of that part of the country from passing the river ; and parties of militia, for further security, were also placed on the opposite banks. Thus terminated our general measures of precaution.

Immediately on our return to the capital, it was deemed expedient to constitute a Board of Health, of which I was nominated president ; and, upon the suggestion of this Board, Government directed two professional gentlemen to proceed forthwith to Marathia, taking with them every possible means for the comfort and accommodation of the sick, directing them to effect the immediate separation of the diseased and suspected from the healthy, and the occupying the best adapted church as an hospital. A military force immediately marched for the interior, with instructions to maintain the original lines established by the committee ; and a deputation of health proceeded to Egripos, the centre of the diseased district. The duties of this deputation were to watch over the health of the whole line, and to demand daily reports from the primates,

or chiefs of villages, transmitting a general daily state of the whole to the Board of Health.

Upon the first alarm of sickness, several of the junior officers of the British medical department, under my orders, came forward with a highly becoming zeal, and offered their services on the occasion. With the sanction of the commander of the forces, I accepted, at that moment, only of the service of Assistant-Surgeon Torne; and he was the first that entered Marathia as a resident medical attendant.

Every effort that humanity and art could dictate, was resorted to for the safety of the survivors of Marathia; the destruction of the few huts that constituted the village, with the susceptible effects, under the guarantee of Government, was ordered. A suitable supply of every necessary article was forwarded from Corfu, and an encampment formed in the immediate vicinity, where the whole of the inhabitants, including the sick, were conducted by myself, having previously superintended the ordeal of washing, shaving, and fresh clothing every individual at the camp-barrier, leaving them in charge of Surgeon Torne. I recommended to him, in the strongest language, to avoid, under existing circumstances, all contact with the sick, and to use as much precaution as possible to ensure his own safety, and that of the troops forming the camp cordon; for the safety of the latter, special in-

structions were issued, and the daily use of oil directed.

The dissemination of disease, notwithstanding the precautions that had been adopted in this limited society, and some alarming information transmitted by the deputation of health stationed at Egripos, induced me again to visit the camp of Marathia, and the district generally, accompanied by two of the principal physicians of the island. The grounds of the report transmitted were strictly examined, and from the information we obtained, it appeared that a disease similar to that with which the inhabitants of Marathia were afflicted, had broke out in the neighbouring villages. We proceeded in our investigation, and, from the facts before us, if any doubt had previously existed, as to the nature of the disease, its contagious character was now unequivocally established. On this point there was no divided opinion; a circumstance that could not fail to urge us to a renewal of the most scrupulous examination of the first causes of the disease, and which now produced an extension of the malady. After much evasive conduct upon the part of many of the principal inhabitants of the interior, assembled under the rules of quarantine, for the purposes of our inquiry, it was admitted that seven or eight *papás* or clergymen, from various villages, had, a day or two previous to my first visit to Mara-

thia, assembled at that unfortunate village, to assist the inhabitants in a religious ceremony, where they remained the whole night, endeavouring to appease the angry spirit, to whose influence, as I have before said, they attributed the whole of their sufferings. This was sufficient to direct our operations: we proceeded to the different villages, reported to be attacked, and the truth of all that we dreaded was unhappily discovered; for disease was traced, step by step, to the residence of every individual who had assisted in the ceremony at Marathia, and from them again to their relatives and friends, and all with whom they communicated; whole families being thus swept away. Our report to his Majesty's government, grounded upon the information we had obtained, stated it to be our belief, that the disease which had appeared at Marathia was of a contagious nature, and that it had by contact with the infected, been conveyed to several populous villages in the district, already committing considerable havoc, and that consequently the utmost danger was to be apprehended. We concluded by recommending the immediate and strict application of the laws of quarantine, to guard the capital and the whole country on the uninfected line.

In consequence of this report, his Excellency issued the most prompt orders, for the inspection and strengthening of the different lines, and the

formation of an outer cordon, and the troops destined for these services, marched on the morning of the 25th of December; the erection of barriers followed, and thus all communication was cut off between the capital and the interior.

To ascertain the state of health of the capital, became now a matter of deep interest. It was therefore immediately divided into districts, under the inspection of proper officers, whose duty it was to visit, in company with a medical person, every house within their respective districts daily, and upon the termination of such visits, reports were transmitted to the Board of Health.

To facilitate the performance of those duties, the head of every family was held responsible, for affixing upon his door, a correct list of every individual within it, including servants and strangers; no change of residence was permitted for the time being; and, further, the head of each family was called upon, under the severest penalty, to make known to the officers of the district, without loss of time, the least sickness that might occur within his domestic circle; upon these reports an inspection took place, and whatever might be the nature of the disease, a communication was made to the Board of Health. Thus in the space of twenty-four hours we were in possession of the actual state of the capital, and in a great measure prepared

to meet any appearance of disease. Further, all practitioners, both in the capital and without the cordon, were called upon to transmit a report of the diseases under their treatment, and in the event of death, a commission was directed to examine the body of the deceased; upon their report to the board, and upon a certificate being granted to that effect, the body was permitted to be interred. The general rules here noticed, alike extended to all parts of the island, and every village without the military lines was, as a precautionary measure, placed under a quarantine of observation for the space of fourteen days; so that if disease had passed the cordon, it would have been immediatly detected, and its effects, in all probability, if not entirely checked, materially diminished.

The diseased district was an object of yet greater consideration. Every village was placed under medical superintendence, and health deputations established in all, communicating daily under the strict observance of quarantine restrictions, with the central district deputation; this latter being in direct correspondence with head quarters.

Upon the organization of a system, thus zealously commenced, we hoped speedily to check the progress of the disease: and the more effectually to carry our general measures into full execution, I proposed to retire myself within

the diseased line, and there personally to combat the malady. His Excellency, the Commander of the Forces, was pleased to accede to this proposal; which had become the more necessary, as many of the individuals in whom we were compelled to repose confidence, on the first appearance of sickness, were more attentive to their own personal safety than to the important duties with which they were intrusted.— Upon my return to the district, I found the different villages where disease had manifested itself, invested by troops, and agreeably to the instructions transmitted to the medical gentlemen stationed in these villages, as well as to the deputations, the inhabitants were reported as shut within their respective houses.

His Excellency had early dispatched a branch of the commissariat to maintain the necessary supplies, both for the troops and for the now-segregated inhabitants: and upon accurate information of the absolute wants of the district, magazines of supplies were established, and regular issues made, in strict conformity with the rules of quarantine. Some difficulty in keeping up these supplies had early occurred, from the severity of the weather, which was almost unprecedented; but the anxiety at head quarters to relieve the wants of the district, and the extraordinary exertions to effect it, soon overcame every obstacle, and rendered the inhabitants,

segregated as they were, in a very short time perfectly independent.

This unfortunate state of the weather, in a country destitute of roads, intersected by numerous rivulets, swollen and rendered formidable by heavy and incessant rain, paralyzed in a great degree many of our best efforts, frequently preventing all communication, and that at a moment when the presence of the higher authorities was so essentially necessary, to give efficacy to those measures which were calculated to arrest the progress of disease.

Our views of the system requisite for the eradication of plague, unschooled as we were, in the management of this disease, were directed by the principles generally laid down in all cases of absolute contagion ; both hospitals and camps were established for the comfort of the sick and security of the suspected ; and, although every effort had been directed to that great end, seclusion and separation, we had yet to learn those grand principles which were to place us upon a firm and solid footing, and give security to all.

Notwithstanding all our exertions, the daily exposure to the air of the susceptible effects of every individual in the segregated villages, the examination twice on each day, of every individual, whether under suspicion or otherwise, at the doors of their respective houses, the im-

mediate separation of the sick, their transfer to hospitals, and the almost instantaneous transfer of the suspected to the different encampments, where they were deprived of every article of dress, and supplied with new clothing; notwithstanding all these precautionary measures, disease was every day breaking forth, although not with its original force, for in several of the small villages we were fortunate enough to eradicate it altogether; and to what cause are we to attribute this failure? Because our measures were not sufficiently matured, when compared to the difficulties against which we had to contend.

The system of expurgation, simple in itself, promised much; and wherever it was resorted to, the seeds of disease were effectually destroyed. But as our measures were not yet matured, every day gave rise to new difficulties. It was evident that, notwithstanding all our orders, and the apparent fulfilment of them at all our visits, the system of seclusion was imperfect, a point that, until corrected, exposed us to the re-action of contagion, and all its train of evils.

That this was the truth, will appear, alas! but too evident: daily exhortations and unexpected visits throughout the whole line, were however made, to endeavour, if possible, to enforce obedience to the laws, and to punish in

the most exemplary manner, such as might be detected transgressing the rules of quarantine, which had been established under existing circumstances, and proclaimed and read at the door of every dwelling.

The unequivocal form that every case had for some time assumed, stamped, as it had early been, with a distinct contagious character, left no longer any doubt upon the mind of every professional man in the island, that it was, in the words of his Excellency the Lord High Commissioner, "the plague, the whole plague, and nothing but the plague." The most zealous upholders of the opinion, that it was generated upon the spot, were amongst the first converts; and, instead of detracting from the merit of those individuals, amongst whom I am free to rank myself, I trust they will be considered entitled at least to the praise due to sincerity. Fortunately for the island, the suspicious character of the disease was from the first moment ascertained, and treated, as has been already noticed, with all the rigour of quarantine. Happy would it have been for the inhabitants of Leftimo, had their Primates been men of more integrity, as an early discovery would have resulted of the extent of the evil, and those measures that had saved the whole population, without the original cordon of Messongi, would unquestionably have confined the disease to the

upper district; but the mischief was effected long before Government had the slightest information of disease, having extended itself beyond Marathia; in fact, we were led to believe that the most perfect health was enjoyed throughout the two districts of Leftimo, and all this by official reports daily transmitted to the competent authorities: indeed, the fact of the existence of disease, was discovered in a manner purely accidental, and originated in my having lost my way in making a partial tour of the district, and unexpectedly entering the populous village of Clomo, where plague was raging, whilst the existence of all disease was positively denied by the clergy, primates, and some gentlemen of the island, who had been compelled to retire to Clomo, in consequence of the formation of the grand cordon of Messongi, but who had taken special care to shut themselves up from the first moment of their entering that village.

The dissemination of disease in the neighbouring villages was soon followed by the death of Assistant-Surgeon Torne, whose indefatigable zeal led him to set at nought all danger. This melancholy event produced considerable alarm for the safety of the camp cordon, with whom, it was dreaded, he had, during the performance of his duty, communicated. As a precautionary measure, we immediately separated the whole

into small parties; all intercourse was prohibited, and every other means that could be devised, resorted to for their safety. Fortunately our efforts proved successful, as the troop continued perfectly free from disease.

It is worthy of remark that, of the numerous troops dispersed all over the district with disease hourly before them (and that too before experience had taught them to estimate and guard against danger), not more than thirteen fell victims to plague; and in every case the source of contagion was most satisfactorily traced. In one instance it was proved, before a military commission, that an entire guard had entered an infected house for the purpose of plunder. The penalty of the law was inflicted on the most guilty, whilst many of the others suffered under the hand of Providence. This salutary example sufficed to check an alarming evil, from which the most destructive consequences might have resulted.

The increase of disease, from the causes already noticed, rendered it necessary to increase our public establishments; and on the 3d January, hospitals and camps were formed at three separate points: viz. Clomo, Argirades, and St. Theodoro, where the sick and suspected were transported according to their relative situations.

These depôts of disease and suspicion were under the immediate charge of professional men;

and invariably one, and sometimes all, were daily inspected by myself. The duty of separating the sick and the suspected, as well as their subsequent removal, devolved upon the medical attendant, in concert with the deputies of health stationed at each village; and all removals were invariably under military escort. Although this duty was of the severest nature, and protracted throughout the winter, and the troops in most instances under canvas, no sickness whatever occurred amongst them. The preservation of the health of the troops, under Providence, must be attributed to the humane attention given to their wants by his Excellency the Commander of the Forces, by whose orders were issued a liberal daily extra allowance of provisions and spirits, and such other articles as were calculated to ensure safety, and afford comfort for the soldiers.

Although the nature of the disease with which we had to contend, was of that inveterate character that, at the commencement, left us but little to hope, many flattering recoveries were almost daily reported from the different hospitals, promising a rich reward for all our labours, the recoveries bearing a proportion to the deaths of about one to four. Nevertheless the great object was as yet unattained, as the extension of the contagion hitherto baffled all our efforts. The vigilance of the public authorities was excited in the strongest manner, and I immediately

repaired to every place where disease broke out anew; but all was ineffectual:—for, at the very moment we had formed the best grounded hopes of success, some unfortunate event occurred to subvert the whole, and it not unfrequently happened that, when we had reason to be certain that every danger was securely confined, it would suddenly start upon us, mocking all ordinary efforts, and not because it was invincible, but (as I have before said) because we could not thus early arrive at any thing like perfection, more especially on the part of our subordinate agents; and, at this very period, when we supposed we had grasped the disease with Herculean force, it escaped with all the changes of a Proteus. Thus in several instances, after the lapse of ten, fifteen, and twenty days, and in one instance of forty days of confident security, the distracting intelligence of a fresh case of contagion would reach us. This is unhappily the distinctive character of the disease, and what we ever must expect, unless we are well assured that every source of contagion has been effectually destroyed: this was in no other instance more clearly illustrated than at the populous village of Perivoli. That village had absolutely been forty days exempt from disease, expurgated, and the inhabitants were on the point of being admitted to free pratique amongst themselves, when a report was transmitted to me by Assist-

ant-Surgeon Muir, that a case of a suspicious nature had at that moment attracted his attention. I proceeded without a moment's loss of time to Perivoli, where I was conducted to the residence of a lay brother, whom I found labouring under every symptom of plague in its most aggravated form. He was leaning against his door, and with a firm voice answered the several questions I put to him; from which it appeared, and of which he himself was convinced, that his illness was occasioned by his handling some clerical robes that he had taken from a box deposited under the altar of a neighbouring church. The fact was evident; the robes had been sent there to avoid being expurgated, and the clergyman, who had made the deposit, was attacked with, and died of plague a few days after. All this resulted from our examination, and our returns proved that the clergyman who had officiated at the church, had been included in the bills of mortality nearly three months previous. The fact of the robes having been deposited there, was known to many of the friends of the deceased, but only made known to the public authorities on the eve of pratique being granted, as the church in question had been long the residence of the officer commanding the cordon. As it was necessary that the robes should be expurgated, the Primates dreaded that it might interfere with the intended pratique; they there-

fore persuaded the officer commanding, that the effects belonging to the church had been placed there for security long before the breaking out of the plague. Confiding in this assertion, the officer commanding, imprudently, and without reference to the officers of health, yielded to the request, that the lay brother, the only person surviving belonging to the church, should be permitted to expurgate them. The unfortunate man proceeded to fulfil the duty thus imposed upon him by the inhabitants on the morning I saw him; he had not been absent more than an hour, when he returned under an escort to his house. Soon after his arrival he was seized with giddiness, and other symptoms of plague, that led to the suspicion upon which I was called to decide.

I had scarce terminated my inquiry, and issued orders for the unhappy man's removal to the Lazaretto, when walking up the street, I was requested to return, as the man was apparently dying, and in an unfit state for removal; before I reached the door he was no more. Three hours had only elapsed from the time he had quitted his house in perfect health. This was one of the most sudden cases I ever witnessed; yet this man's sufferings did not appear to be by any means severe.

The unfortunate person, happily, had no family, not even a servant. We were perfectly

satisfied that he had had no communication whatever with any individual from the first appearance of disease in the village; and this, more from his habits of retirement than from any dread of disease. By this fortunate circumstance, the malady was checked on the instant; the effects of the deceased, together with the church robes, were sent to the Lazaretto, and the house immediately expurgated. No other case of plague occurring in Perivoli, after the lapse of a quarantine of observation, the pratique, which was, by this fatal accident, interrupted, was granted with the fullest security to the country.

I have thus detailed the first appearance of plague in Leftimo, and described the form under which it was ushered as well as the measures resorted to for its eradication. I have stated the hourly disappointments, hopes, and fears, which accompanied us in every stage of our operations, with the success which we, in several instances, met with in checking disease, and rescuing many from the very grasp of death. This embraced a period of nearly two months, during which, upwards of three hundred of both sexes, and all ages, fell victims; I may, with justice, say, more through obstinacy, in violating the established regulations, than from any other cause; for, however imperfect the execution of these regulations in many instances might have been, the extent of the danger was hourly proclaimed.

I shall now enter upon those points more immediately connected with the general system so successfully adopted, important in its consequences, not only as it regarded the inhabitants of Leftimo, but as it may hereafter affect mankind at large, establishing the efficacy of a system resulting from experience, and which was carried into execution, I may be permitted to say, with more than ordinary zeal.

An interview with his Excellency the Lord High Commissioner, of some hours duration, at the barrier of the health office, immediately upon his assuming the government of the Ionian States, could not fail to impress upon my mind, the important axiom in plague, that to rid a community of this disease, it is alone necessary to have recourse to the seclusion and separation of the infected and suspected; but that, unless this was securely done, we were labouring in vain; and that this, and this alone, was the grand secret in the eradication of plague, had been most clearly demonstrated both at Malta and Gozo. The experience of these plagues also shewed that the faithful execution of the duties of the subordinate classes employed, under the critical circumstances of plague, was rarely, indeed never, to be relied upon; and that nothing short of the jealous eye of authority, and the overawing presence of a military force, thrown up to every door in an infected town, could ever

ensure safety, or guarantee the due fulfilment of those measures, which were necessarily resorted to for the extinction of the contagion of plague; principles, I confess, that at the first view of the subject, appeared to me to be fraught with the utmost danger, but which, upon trial, fortunately proved otherwise. Many other points of importance engaged his Excellency's attention. Amongst the most anxious was, his desire of concentrating, as much as possible, both the infected and suspected, with the avowed intention of limiting, as far as circumstances would permit, all sources of danger, at the same time urging the advantages that were to be derived by giving a wider range to suspicion than had heretofore been practised. The result certainly proved the soundness of these doctrines.

It scarcely requires noticing the advantages that early resulted from those principles; and it will be readily admitted, that nothing can render a quarantine more efficient than the removal of every possibility of infringing established rules; in fact, it should be received as a plague maxim, to trust to no man. It is a necessary maxim, and when prudently enforced, cannot fail to be productive of the happiest consequences. The truth of this was subsequently demonstrated throughout the plague, of which we are treating; and experience has deeply impressed it upon my mind, that this can only be effectually pursued by

establishing and enforcing, in the clearest and strictest manner, a firm and united chain of responsibility, every link of which should be jealously guarded by the eye of authority.

To act up to these principles, the first step was to diminish the number of our hospitals, and circumscribe our encampments. Many obstacles, and some of a serious nature, opposed both one and the other—not only from the nature of the country, but from the severity of the season. However, from a conviction of the truth of his Excellency's observations of the advantages derived under a similar system at Malta, there was no hesitation as to the line of conduct that was to be pursued; and, notwithstanding the difficulties against which I had to contend, I pledged myself that no exertion should be wanting; and, happily for the country, the efforts that were made were crowned with success.

Our operations were commenced the same evening, and a large portion of the troops, investing the several infected villages, were conducted into the interior; guards were posted in the centre of each street, the whole being provided with quarters in houses that had been previously expurgated under my own eye.

The erection of some temporary bridges over the swollen rivers, which was rapidly effected, opened at once a communication with all parts of the district; which, added to a favourable change

in the weather, enabled me, in the space of a few days, to break up the pest hospitals and camps established in the interior of the district; and to remove both to the sea-shore, where I had selected an extensive flat of ground for my encampment, the front secured by the sea, and the right flank by a deep river, whilst neighbouring magazines offered every accommodation for our hospitals. The site having been approved by his Excellency, accompanied by a large military escort, I conducted every individual belonging to the hospitals and camps, amounting, between sick and suspected, to upwards of three hundred persons, with their requisite equipage, to their respective situations.

The expurgation of the vacated depôts of disease and suspicion was, at the moment, commenced; and I undertook the arrangement of the camps, under the able direction of Major-General Phillips, who was charged by his Excellency with adopting such measures, and transmitting such instructions to the diseased district as appeared to him most conducive to the general aim.

In calling forth a portion of the inhabitants for the duties of the partial repairs of the roads, over which the sick and suspected were to be transported, and the formation of temporary bridges, such only were selected as were, in every respect, removed from suspicion, being the inha-

bitants of villages, which had throughout been exempt from disease; and during the short time they were thus employed, all communication between the different families, so employed, was strictly prohibited, and every individual conducted under military escort to and from their respective residences; thus granting to each family as much security against disease as if they were shut within their respective habitations. The service terminated under these precautions, without any accident whatever.

The effect of throwing troops into the villages, the seat of plague, thus cutting off all communication (unless under circumstances that human prudence could not foresee) was, as might be calculated upon, productive at an early period of decided benefit. But the character of the people we had to contend with, left us still in the most anxious doubt: for, although sentries were every where placed both day and night, assisted by frequent patrols, we still apprehended that attempts at clandestine communication would be made, and learning, for the first time, from his Excellency, that a similar infatuation to incur disease existed at Casal Curmi, in Malta, where the inhabitants were not only walled in, but locked within their respective dwellings, I determined upon having recourse to the latter method; and in addition to the security granted by the presence of guards, I caused each house

to be locked every evening, previous to sun-set, and the key of each door placed in a contiguous secure situation, where it remained until after sun-rise, when the doors were opened for the purpose of general ventilation, and for receiving the daily supplies. So jealous was I of the performance of this duty, that it was invariably executed in the presence of an officer of health: and further, when the nature of the building led me to apprehend danger, by means of the windows, I then caused them to be barred; nor was I satisfied with the reports of the execution of these orders, but the whole came, almost daily, under my own inspection. Thus it might be said, that the plague was hermetically sealed.

The disasters to which the inhabitants saw themselves daily exposed, and the struggles on the part of the Government to relieve them from the dreadful misery under which they laboured, at length roused the people to a sense of feeling and shame. The assurance that every public effort was for their good alone, and all their wants being humanely attended to, induced them at length to acknowledge the propriety of the most rigorous measures, and to yield with implicit obedience and firm confidence in the result; nor were they deceived, every hour now not only diminishing danger, but offering a guarantee to the general safety; so much so, that by the latter end of March, we were enabled to

pronounce the upper district of Leftimo, embracing seven extensive villages, scattered over an immense tract of country, to be liberated from that dreadful scourge, which so long threatened the whole population within the cordon of Mesongi. But before this was effected, we were compelled to have recourse to the only alternative which was left us, that of carrying off to newly established camps and hospital, on the plain of Perivoli, every germ of contagion, either as it regarded men or matter; a service, it will be allowed, that required not only the utmost perseverance, but the most close and accurate observation. What will the favourers of the doctrine of the non-contagion of plague say to all this, and how will they reconcile the fact to themselves, when they call to mind, that the whole of the sick, comprising three pest hospitals, were transferred to the central hospital, a distance of nearly three miles, the sick being in every stage of disease, the whole forming a formidable procession of some hours duration, and being closely guarded by troops? This service was continued for three successive days, and more, and each transfer was attended by myself, accompanied by several officers. Yet we do not find that there was a single instance of any of the numerous escorts employed on this dangerous service ever having been infected. Here are no false facts, but matters as public as the

day; notwithstanding which, we are told that a single infected person is sufficient to contaminate the air of a whole city.

At the period when the upper district was liberated from plague, the total deaths in both districts amounted, upon the most accurate calculation, to three hundred and seventy-five; however, to oppose to this mortality, we had the consolation to reckon eighty-five convalescents, a number, considering the nature of the disease, and the difficulties we had at first to encounter, amply repaying us for all our trouble and anxiety; for, even admitting that had Nature in every case performed the cure, we had the satisfaction to know that so much danger was removed from society. The establishments to which the sick from the commencement were removed, were at least secure asylums, where the wants of the sick bed were punctually supplied, a circumstance in nine cases out of ten, that certainly would not have occurred, destitute as the unhappy beings were of every means of support, and abandoning each other as they did upon the first appearance of disease. It is therefore to these asylums that we owe the large proportion of recoveries; a proportion, when we consider what plague truly is,—its terrible symptoms—its rapid progress,—and the dread excited by its very name—which cannot be altogether destitute of interest, however it may be viewed,

whether as resulting from medical science, or as effected by the general police system which was pursued. For my own part I am clearly of opinion that, in the general treatment of plague, these two branches become totally inseparable from each other, as we assure ourselves that, by the proper application of both one and the other, we can reduce the whole matter to the certainty of a mathematical calculation, thus rescuing from inevitable misery, whole communities of human beings.

From what has been throughout advanced, it unquestionably will appear, that the grand and leading principle in checking the propagation of plague, is now clearly understood, and fully recognised, as resting solely upon concentration, and the interdiction of all communication between the infected, suspected, and healthy part of a community; and it will be seen that, under the most untoward circumstances, when the measures for separation are timely resorted to, plague, that awful malady, which has ever been considered as the severest visitation the Almighty has inflicted on mankind, loses its terror, and, in its ultimate consequences, becomes far less destructive than many of the epidemics incidental to these latitudes, and which have been so frequently and severely felt on the shores of the Mediterranean; and it will be further evident that, however deficient a country may be

in general resources, the means to meet public emergencies of this nature are always within reach, thus enabling Government to cut short disease upon its first appearance either in town or village.

The extinction of plague in the upper district of Leftimo, enabled us to direct our undivided attention to the lower line, where the disease had for some time continued its ravages within the villages Anaplades, Ringlades, St. Theodoro, and Potami; but as no new cases had occurred for more than fifteen days, there was every well-founded reason to hope that the plague was in these villages also eradicated. In fact, after such a lapse of time, it was but natural that we should entertain a very strong assurance of the extinction of disease: but, unhappily, the means of expurgation were limited, many infected houses, in consequence, remained to be expurgated, and so long as these deposits for disease were unpurified, danger was ever to be apprehended. Indeed, we had early experienced, that many of the peasantry, in defiance of all danger, and of the existing precautions, had found means to evade the vigilance of the guards; under the shadow of dark, rainy, and stormy nights, they entered these fatal premises, and, with infected goods, brought disease into the very bosom of their families. Our first object, therefore, in the lower district, was to follow up the principle of

concentrating our sick—in this instance one of the most delicate duties which we were called upon to perform, not only from the numbers of the sick then in the hospital of St. Theodoro, but also on account of its distance from our central hospital, or general sick depôt. This being terminated, the expurgation of the infected houses on that line of country, was forthwith commenced.

It was early ascertained that many of the inhabitants had concealed infected goods, (a practice which we have already noticed had been productive of much evil at Malta, particularly in Casal Curmi,) a knowledge of which induced the daring and evil disposed to seek every opportunity for searching after hidden treasure; and to those sources are to be traced the reappearance of plague in the lower district.

After this pause, it is not to be supposed that the disease varied in its general character; but, as might naturally be expected, it returned unabated, if not aggravated in its violence; however, as our measures had not only at this period become matured, but our means undivided, (the whole body of expurgators being employed in these villages,) the danger, day after day, became comparatively less: at the same time our camps enabled us to give a wider range to suspicion, which is one of the most important points in the treatment of plague.

The town of Melicchia, which had hitherto been considered as uninfected, although some slight cases of suspicion had occurred within its precincts, unexpectedly called for my attention. Here I had taken up my residence, for the purpose of general superintendence, and more especially, for the expurgation became highly interesting, as the termination of this operation promised to rid us of an enemy, whose existence had been so long and so strongly favoured by the very individuals who were its daily victims. The length of time which had elapsed from the occurrence of the case that had excited suspicion in Melicchia, and no symptoms whatever of plague having appeared among such as were under suspicion, and had passed their quarantine in camp, lulled us into a state of security, and flattered us with the hope, that the strong natural barrier which separated Melicchia from the infected line, defended also as it was by a military force, and active police, would have effectually saved its inhabitants from the scourge of disease. No effort, however, appeared sufficient to impede its progress; the river Potami, which divides the town of this name from Melicchia, had hitherto been its boundary; but, faithful to the course it had run, checked as it effectually had been by the great cordon that extended across the island from north to south, the disease cross-

ed the river, where it finally terminated, I may almost say, at the very brink of the sea.

Upon the appearance of plague at Potami, the inhabitants of Melicchia, from its contiguity, were placed under close observation; daily medical inspection took place, and, although intercourse between the families was not expressly prohibited, precaution was strongly urged. The inhabitants were prevented from entering the country, and their churches and places of public resort directed to be closed.

Such was our imaginary security on the 2d of April, 1816, when the medical officer of Melicchia (Assistant-Surgeon Goodison, of the 75th Regiment, whose conduct, during a perilous and arduous duty, merits the highest encomiums) called upon me to state that he had visited a young woman reported ill that morning, and from her general appearance he strongly suspected the case to be plague. I proceeded without delay to the house, and on demanding to see the patient, staggering, she was led forth by an aged mother; she was unable to continue in an erect posture, her limbs trembled, and I soon perceived that there was not wanting a symptom which marks plague in its most aggravated form.

It appeared that this young woman, Maria Canta, had been working in her garden in the

rear of her house, the preceding day, and that towards the evening, faithful to the period that plague was invariably ushered in, she was suddenly attacked. The disease had assumed the most malignant form, rapid in its progress, and promised to be as rapid in its termination; the prognosis was too true; for shortly after she was received into the hospital death terminated her sufferings, the disease running its course in thirty-six hours.

The family, and all who were suspected of having communicated with them for several days previous, were transferred to the different camps, according to their respective grades of suspicion.

The fate of this interesting young woman, who had scarcely attained her seventeenth year, and who was to have been married as soon as the quarantine restrictions were removed, excited the strongest sentiments of compassion and alarm; and nothing was left undone that experience or humanity could dictate, not only for her relief, but to avert the general danger with which this new case seemed to threaten us*.

* The following extract from the letter addressed to the author by Major-General Sir Charles Phillips, officiating *pro tempore*, for the Lord High Commissioner, and commanding the forces in the Ionian Islands, will tend to give the reader a

The unequivocal form, in which the disease showed itself, marked at once by buboes, carbuncles, and petechiæ, left no room to doubt the melancholy truth of the introduction of the plague into Melicchia; and as the inhabitants were pretty generally in communication one with another, the very worst was to be dreaded, and the whole country was threatened once more. It was therefore of vital importance to trace the source of this disease; and to follow, with the most scrupulous exactness, every (even the most distant) communication.

This investigation had but just commenced, when an aged female of the same name, and distantly related to the deceased, was taken ill. The residence of this woman was distant from the first case. As she was attacked, however, on the 24th, two days subsequent, it was evident that the plague must be either general in the town, and on the point of openly bursting forth, or this woman must have had direct or indirect communication with the first unhappy sufferer.

just idea of the importance attached to the measures here alluded to, and further noticed in the sequel.

“ I have received your’s this morning, and am exceedingly pleased with the prompt and energetic measures you have adopted on the re-appearance of the plague in Potami and Melicchia; they will most probably save the rest of the villages on the river.”

Without this being clearly ascertained, I felt it would be utterly impossible to strike at the root of danger; and, under this conviction, I called for the services of a Greek priest, whose zeal I had witnessed on similar occasions, and requested him to accompany me to the houses of all those with whom we had reason to believe either of the members of those families, in which plague had manifested itself, had communicated; urging him to explain to them, in the most impressive terms, the importance of a candid confession. This duty was faithfully fulfilled; and the members of the immediate family of the aged female under disease were threatened, at that awful moment, with excommunication, if they withheld the information so anxiously required. This produced the desired effect; and a confession followed, developing a long list of persons, with whom the family were in the habits of intimacy and daily intercourse. It appeared, however, that the old woman had not quitted her house for a considerable time.

The patient was the next object of attention; I examined her immediately. Two evenings previous to my visit, she had (to use her own words) an "aguish fit," which continued nearly two hours, and was followed by head-ache more than usually severe; but as she had frequently similar attacks during the winter, she took no particular notice of it. The last evening it came on sharper

than usual, with increased head-ache, and several other symptoms that were strongly indicative of plague; her eyes were heavy and watery, her breathing was hurried, the vital spark seemed to be fast receding, and with little suffering, and the utmost tranquillity of mind, she appeared insensibly passing to the tomb.

This was the first time she had been visited under suspicion; she was faint, and was supported in the arms of her son, a strong young man. I discovered the following characteristics of plague, a bubo in the right groin, and an incipient one in the axilla of the same side.

This, like the former, was a hopeless case; although the symptoms did not appear urgent, death was evidently not remote; the patient was removed to the hospital without loss of time, where she expired the same evening.

From the confession of the son, I had learned that he was in habits of intimacy with the family of the deceased Maria Canta, and had passed some time at their house when she was taken ill; he had also assisted her in the first moments of her indisposition. The case was thus far clear, and there was no longer any doubt as to the source from whence the mother received disease, the son being unquestionably the vehicle of contagion, imparting it to his aged and debilitated parent, although he escaped disease himself.

I now proceeded in my inquiries, accompanied by the priest, in his robes, collecting all who had communication with the infected families, in searching for whom, I adhered strictly to the information I had received in the morning, and even tracing out all those with whom the latter had communicated within the preceding seven days. I thus classed my grades of suspicion, until both degrees amounted to fifty-four persons.

I sought to detect danger by every means, and to follow up contagion to its remotest lurking place, and for this purpose had given the widest range to suspicion, and had transferred the whole to the several camps without permitting any communication between the different families of either degree that came under observation. Notwithstanding these precautions, I was prepared for greater mischief in the town, experience having taught me not to despise the enemy, whose insidious progress I found it so difficult to arrest, aided as it had been by the want of truth and sincerity on the part of many in whom we had confided.

The whole population of Melicchia were prohibited quitting their houses upon the appearance of the first case of plague, and depôts of provisions were formed upon the spot. This system was invariably had recourse to, from the commencement of the plague in every infected vil-

lage; but we have seen that it was not efficient, as nightly communication took place between several of the families, thus, in many instances, spreading wide the disease in the moments of the fullest confidence. Straggling villages, largely populated, without streets or roads, and which, from the nature of the soil, during the wet season, were scarcely passable during the day, rendered it difficult for centinels to ensure that security upon which the eradication of the disease depended; and as we had fully recognised the principle that seclusion and separation in their literal meaning was the only doctrine necessary to be maintained, and that which alone gave security.

I resorted to the same measures that had been happily pursued in the upper districts. Every house was under lock and key, indeed, as our military means were increased, every house, I may say, was invested, and to make "assurance doubly sure," the eyes of every public authority were directed to all parts of the town.

But what was my surprise, when I received private information that three of the principal churches of Melicchia, had been clandestinely opened on Easter Saturday night, and service performed in all three to crowded audiences. This breach of public order took place on the 20th of April, two days previous to the breaking out of the plague in Melicchia.

If my anxiety had been called forth upon the appearance of the two first cases already noted, the horror impressed on my mind by this information can easily be conceived. I dreaded lest all my exertions might be ineffectual; nor could I persuade myself but that these unwarrantable meetings, at that unhappy moment, would infallibly be productive of the most terrible consequences.

My first attention was directed to the individuals who, under the shadow of religion, had so shamefully violated the established laws, as they regarded even ecclesiastical points; for these laws were not only framed but promulgated by the head of the church. The priests, one and all, with their families, were forthwith removed to the camp of observation.

I had yet to discover the source of the plague on this side of the river, now apparently of the first importance. The mother and family of the deceased Maria Canta were inflexible, with whom all my efforts were ineffectual, as they firmly denied all knowledge of the cause.

At length, after much perseverance, on the morning of the 25th, three days from the occurrence of the first case, I obtained the much wished-for information through the medium of confession; by which it appeared, that a man of the name of Vasili Samvili, a native of Potami,

and a relative of the deceased Maria Canta, had a few days previous descended along the river, evading the vigilance of the sentries, and observing the deceased and her mother in their vineyard on the opposite banks, contiguous to his property, he requested their superintendence in the pruning of his vines, as communication was cut off between both towns. To ensure the work he threw four piastres, or small pieces of money, wrapped up in a piece of linen, across the river, which the mother of the deceased carefully deposited in her bosom. On returning in the afternoon, the mother handed the piece of linen, as she picked it up, to her daughter, who put it into her box, where it remained for a few days, until she was called upon to make a payment; on that evening, and after handling the contents of the linen, she was seized, as has been already noticed.

Two days after this transaction, that is to say, after Samvili had thrown the money across the river, he (Samvili) was attacked with plague of the very worst degree; and out of his family, which consisted of five individuals, not one escaped: all fell victims to the disease! This man had no communication with the family of Canta: they were separated, as I have shewn, by a wide river, over which he cast the money; and it is evident, that at the moment he issued

from his house he was under the influence of disease, although it did not manifest itself until two days after.

It appears strange, that the mother who received the money, and with it the specific poison, should escape; and that the contagion should lie dormant for so many days is not less so; for we observe after this deceitful lapse of days, a disease ushered in unmasked and followed by a train of terrible symptoms. Yet the mother was not attacked; although she never failed in her attentions to her child, supporting her in her arms until the fatal moment that conveyed her to the hospital and separated them for ever.

The very extraordinary course of disease, in these two cases, will not escape attention: the daughter receiving infection from the very hands of the parent, and (in a different family from the same source) the son conveying the contagion to the mother, both these vehicles, at the same time, escaping disease themselves. Nor did this extraordinary course of the disease terminate here. For on Friday, the 26th, (the disease still observing the lapse of forty-eight hours in its advance) the son of the Primate, Giovanni Canta, a boy about ten years of age, was attacked. The father, a man for whom I had a high respect, in a distracted state of mind, assured me, upon my visiting the child, that the indisposition was brought on by worms, that

the child had passed a hot and restless night, but that he was now considerably better, and in a sound sleep: he therefore requested me not to disturb him, and begged me to return in the afternoon to see him, when he made no doubt but he would be quite recovered. To this I would not consent; he consequently took him up in his arms out of bed: I observed the child was in a state of drowsiness approaching to coma: the father attempted to rouse him, and to place him upon his legs; the child staggered, but was roused on the right foot touching the ground, drawing it up in a manner indicating much pain. On desiring the father to pull up the child's shirt and turn him towards the light, with a view of examining him more accurately, in the agony of despair he attempted to conceal the melancholy state of his child, by twirling him round and round, keeping his hand upon the right groin and endeavouring to cover a large bubo. This, however, was not necessary to stamp the nature of the disease, as there were many other general symptoms of an equally decisive character. The sufferings of the child were not of long duration; he died the same evening, a few hours after he had been received at the hospital.

The family were of course immediately removed to the camp, established for the reception of the highest grades of suspicion. Pre-

vious to their departure, they underwent minute medical examination, and all alike appeared perfectly free from disease; nevertheless, on the same evening, the mother of the deceased was taken ill, but her indisposition was imputed by her husband to her anxiety for her child, of whose fate she was still ignorant. She complained much of pain and throbbing of the temples, with giddiness and a degree of chilliness; at midnight she jumped out of her bed frantic, and after many efforts she was again put to bed in an exhausted state. Early in the morning she was visited: there was a total prostration of strength, low delirium, and her neck, breast, and arms were covered with petechiæ. She was removed to the hospital, where, shortly after her arrival, she was seized with convulsions, terminating in coma and death, surviving the attack only twenty hours.

Fortunately, from the precautions adopted, the remainder of the family escaped. Here we again find the parent the vehicle of contagion, without encountering danger.

Exemptions from contagion, under rather marked circumstances, were noticed in several instances throughout the progress of the plague. But in those instances they attracted particular attention from occurring in succession; and the individuals infected through the medium of those exempted from disease, exhibited symptoms

of a most malignant and fatal character. That such a state of the constitution exists will not be questioned ; this subject has, I trust, although partially, been satisfactorily dwelt upon, in the first chapter ; yet, I may be permitted to add that, notwithstanding this strange immunity, it is probable, had the plague continued for any length of time, and had these persons, from any unfortunate circumstances, been again exposed to the force of contagion, they would not thus have escaped danger.

Returning to our proceedings. The day following the breaking out of the plague at Mellicchia, the primate of that village was called upon to proceed to the barrier of the commissariat magazine, three miles distant, to arrange for a further supply of provisions for the inhabitants. Before he proceeded to this place, he borrowed a pack-saddle from the young man whose mother was noted as the second case of plague, and this saddle had been handed him by his relative, Maria Canta, the night she was taken ill. The primate carried the saddle to his house, and rode on it for three hours, and returned with his accustomed confidence to the bosom of his family ; notwithstanding which, as I have above stated, he escaped disease himself, thus furnishing another to the many instances of the peculiar and arbitrary law which governs this in common with many other contagious diseases.

The appearance of plague in the house of the primate involved upwards of forty persons in suspicion; and on this occasion I administered an oath to all above twelve years of age, touching the nature of their communication (for it will be recollected that, but a few days previous, all intercourse between the inhabitants of Melicchia was left to their own discretion) by which measure I was enabled to form them into distinct classes, according to their different degrees of suspicion.

Upon the removal of the infected and suspected, the infected houses were immediately expurgated; and every article of a susceptible nature, belonging to these unfortunate people, was immediately removed to the *depôt* for infected goods, established in the vicinity of the pest hospital.

The remaining inhabitants of Melicchia underwent medical inspection morning and evening. The whole of their susceptible effects were daily handled and ventilated by themselves; their furniture washed with hot water and soap, and daily placed in the open air, either in front or rear of their respective houses; every house was supplied with a sufficient quantity of lime, and the whole washed by the occupiers, both internally and externally. By rigorously enforcing these measures, every individual was kept in con-

stant employment, and the actual state of the public health soon ascertained.

It was consoling to observe that, by these efforts, the further propagation of disease was instantly checked; a disease as marked as formidable, and as fatal in its termination as any which had occurred from the commencement of that dreaded malady. Nevertheless, we find that, of the numbers subjected to its influence, few were attacked; and such must ever be the result, when these means are employed with sufficient energy, which are known to be capable of effectually destroying the force of contagion. And I had the heartfelt satisfaction of carrying the whole of these measures into execution, which, under Providence, saved the inhabitants of Melicchia from the direst of all human calamities, and of witnessing the total extinction of a disease that threatened the most fatal consequences, breaking forth as it did amidst an intermixed population, and that within the unprecedented period of eight days. Nor was it less consoling to witness the happy escape of the whole of the suspected persons; all of whom, after having performed their camp quarantine, I had the satisfaction of personally conducting to their respective houses.

That the principle of surveillance, or a strict enforcement of the established laws of quarantine,

was a point of the deepest interest, will appear evident from the progress which contagion made in the different distinct populations, inhabiting the extended districts of Upper and Lower Lef-timo.

In these populous villages, which admitted free intercourse both by day and by night on the part of all public authorities, it is seen that the consequences were early felt; in these places disease was speedily arrested, as all communication between the inhabitants was on the instant cut off; whereas, as we have already shewn, the mortality which followed, from our local impediments, as well as from the unparalleled severity of the season, was in the highest degree conspicuous, evidently proving upon what principles our security rested.

At the period when Melicchia was attacked, our efforts for the extinction of contagion in the suffering villages of the district continued unabated; and, as the expurgation was rapidly advancing, so was disease vanishing; so much so, that for many days little more than casual cases occurred; and as those were early traced, and the same decisive system followed up, our labours were rapidly terminating. Success had particularly marked our efforts at Potami, where the plague had been widely disseminated; but now all disease appeared at an end, when, on the 27th of April, it was reported to me that a fresh

case of plague was discovered in that community. Depressing as this information was, I relied for the public security upon the conviction, that all communication between the inhabitants had been most effectually cut off for some time.

On arriving at the house where disease was reported to exist, I found the patient, a young man about twenty-five years of age, sitting unconcerned at an open window; there was a peculiar wildness in his looks, although he took no notice whatever of my approach; he was, however, attentive on being questioned, and advanced towards me with a firm pace; he said he was aware he had the plague, that it was a visitation from Heaven, and that he bowed with submission to the will of his God. It was too true, his symptoms were of too marked a character to be mistaken. He arrived at the hospital about four hours after my visit, where, notwithstanding every assistance, he died on the following morning.

The sister of this young man, who was apparently in perfect health when I examined her in the morning, was attacked the same evening; the symptoms were precisely the same, and the disease run its course in a similar period.

At the time these cases occurred, Potami had been eleven days free from any accident, the clothes of every individual in the place had been handled and aired daily, and there was every

reason to believe that all danger was past. This was pretty nearly the case, as the only remaining germ of plague in Potami manifested itself in this new case; I satisfactorily traced the source of the contagion, and my mind was therefore perfectly at rest, as the remedy was in my own hands.

The deceased, Spiro Samvili, was a relative of the family of the same name, by whose incautious conduct the plague had been introduced into Melicchia. On the day of the departure of the infected members of that family for the hospital, Spiro received from Vasili Samvili a bread trough, his own property, which had been for some time in the house of Vasili, he received it as it was handed to him, their houses being contiguous, and took no notice of the cord affixed to it, and with which it had been suspended; he carried it to his house, where it remained in his apartment until two days previous to his attack, when he used it for the first time in making bread.

The primate of the village confessed his knowledge of the circumstance, but did not think any danger could result from his receiving it, not being aware of its having any thing susceptible attached to it.

The safety of Potami was evidently not endangered by this unfortunate event. The house was expurgated according to the recent system

on the same day, the susceptible effects were consigned to the depôt, and with them all further danger, as this was the last case of plague which occurred in Potami.

By this time the general expurgation of the lower district was nearly effected. This process, and the discovery of concealed effects, now alone occupied our attention, as all the villages were at length perfectly free from sickness, and many of them were even far advanced in their foul quarantine. Unhappily there yet remained some infected houses, which, with all our exertions, we could not embrace within our sphere of expurgation; as it will be recollected that, so long as we had to combat disease in the upper district, we were compelled to leave the expurgation of many of the infected houses dispersed throughout the lower line, until the whole of our means could be collected together; and notwithstanding all our precautions, we had yet one more struggle ere the final termination of the plague.

On the 6th of May, when the whole district had for many days entered upon its foul quarantine, I received a communication that the plague had again broken out in Anaplades. I confess at the moment I doubted the truth of the statement, but on visiting the house of Signor Georgio Calogeropolo, the accuracy of the report was no longer to be questioned. The daughter, an

amiable young woman about eighteen years of age, with tottering limbs, and deadly aspect, but calm and resigned, was brought before me. The parent, in a state of distraction, with his eyes fixed upon his dying child, assured me her illness was only of a few hours duration, as it was some time after midnight when she was attacked. Upon examination, I found the usual characteristics of plague upon her; all the medical aid in our power was afforded, but in vain, her sufferings were great, and continued until next morning, when she expired.

This family consisted of Signor Calogeropolo, his brother, one son, three daughters, and a servant maid. As the son, with his uncle, from family causes, resided in a separate apartment from the remainder of the family, and as it was well ascertained that they had had no communication with the other branch of the family for some time previous to this unfortunate event, they were of course considered a degree removed from the strongly suspected, and they were consequently sent to the camp allotted for that particular class. They passed their quarantine in perfect safety, but, I regret to say, that of the remaining members of the family, who came under the higher shade of suspicion, a female child and the servant only escaped.

There was no difficulty whatever in ascertaining the cause of this new infection, although the

family, as was too generally the case, protested a total ignorance of the matter. On examining the premises, I observed at some short distance, a body of expurgators, who, after having purified an infected house adjoining the extremity of Signor Calogeropolo's garden, were setting fire to a heap of rubbish and rags; a half burnt heap was close by, a quantity of which had inadvertently, and through ignorance, been carried off and spread upon the garden by the females of this unfortunate family, thus innocently exposing themselves to contagion in so many different forms.

Sentries were invariably placed over these burning heaps, nor were they removed until the residue was buried in deep pits, but their vigilance on this melancholy occasion was evaded. As Calogeropolo's house was detached, none beyond the family were involved in suspicion, and from this circumstance, and from a feeling of the state of security in which the remaining families in Anaplades were, I was perfectly convinced within myself, that no further evil was to be apprehended from this truly unforeseen event—so much so, that I submitted the same in an official communication as my firm belief, which, I am happy to say, proved correct, these being the last cases of plague which occurred without the lazaretto in Corfu.

Thus terminated a disease, the origin of which

had been for a long time involved in the darkest obscurity; but which was ultimately ascertained, by the most undoubted proofs, to have been introduced through the medium of infected goods, which, by a strange combination, had remained on the island under lock and key for a considerable time, and finally only opened under peculiar circumstances.

The following is the fact to which I allude:—

Signor Potiti, an inhabitant of the town of Corfu, and a land proprietor, had an agent, a native of the island, resident at his country seat, which was situated close to the sea-shore in Lower Leftimo. This man was in habits of intimacy with a person of the name of Spirachi, who was master of a small boat, with which he carried on a traffic between the Island of Corfu, and the neighbouring continent of Turkey. Captain Spirachi, as he was called, was a native of Perivoli, a village distant about a mile and a half from the house of Signor Potiti. Spirachi had been long in the habit of carrying on a smuggling trade between Albania and the Island of Corfu; and, in all those excursions, under the shadow of night, he usually landed his contraband goods in a magazine close to the beach, a little removed from Signor Potiti's house. It was after one of these excursions, and the very last which he made, that immediately on his arrival, he consigned to the care of his friend, the agent of

Signor Potiti, a large box. This box was deposited in Signor Potiti's house. After the consignment, Spirachi proceeded to his residence at Perivoli, where his wife was living, carrying with him a small parcel only. Some few days after Spirachi's arrival at home, his wife was taken suddenly ill, and as suddenly died. This event alarmed him considerably; so much so, that he immediately resolved upon quitting the country; to which act, there was every reason to believe, he was instigated by the influence of some secret impression in regard to the cause of his wife's death. As he had no family he found no difficulty in executing his plan. For this purpose he proceeded to the house of Signor Potiti, where he met his friend; and being in want of money, he borrowed from him the sum of twelve dollars, previously informing him of his intention of forthwith proceeding to Albania. To ensure the payment of the money received from Signor Potiti's agent, Spirachi decided upon leaving the box, which on his landing he had consigned to the care of the agent, and which was still in his charge, stating it to contain various articles amounting to about five hundred piastres.

As the period for Spirachi's return was not fixed upon, he directed the agent, in the event of his not soon hearing from him, or that his absence should be protracted beyond a few months,

to dispose of the contents of the box on his, Spirachi's account, indemnifying himself for the sum advanced. All this was the transaction of a moment, as Spirachi did not enter Signor Potiti's house, but proceeded directly to his boat, which was in readiness, when he set sail for the opposite shore.

After the lapse of a year and more, and not hearing any thing of his friend Spirachi, the agent turned his thoughts towards the deposit. Upon opening the box, the contents were found to consist of various articles:—an opera hat, shirts, and a quantity of silk handkerchiefs, which were new, and at the bottom, several copper kitchen utensils, &c.

The day following this occurrence, the agent proceeded to the village of Marathia, to conclude a contract, on the part of Signor Potiti, with Signor Massaracchi, primate of that village, for a quantity of olives.

During the arrangement which took place at the house of Massaracchi, the agent being particularly acquainted with the family, Signor Massaracchi's child, a boy about seven years of age, sat some time in the agent's lap. The same evening the child was taken extremely ill, with violent vomiting, and scarcely had Potiti's agent reached his residence, when he was also taken suddenly ill and died in a few days. The child survived only three days; before his death, Signor

Massaracchi himself was taken ill and died very shortly after. Signor Massaracchi's daughter, a married woman, and an inhabitant of Clomo, on hearing of her father's illness and of the death of her brother, went immediately, accompanied by her husband, to visit her family. Both these persons were taken ill, and returned with disease upon them to Clomo, where they shortly after died. These were the first victims to the plague of Corfu, occasioned by contaminated goods introduced clandestinely into the country. The unhappy fate of the servants residing in the house of Signor Potiti, has been already noticed, as well as the manner in which the plague was propagated to all parts of Leftimo.

CHAPTER VI.

The System of a forced Separation, the only Means of checking the Plague.—Its general Expediency.—Arguments raised against it, refuted.—Method of provisioning a segregated Population detailed.—And of protecting the Plague Attendants from Danger.

THE insidious aspect, which this fatal malady assumes on its first appearance, has been particularly noticed in the early part of this work, offering a convincing proof that plague may be ushered in under the mask of other diseases; and it is to be observed, that the decline of the disease, as witnessed in the cases which occurred at Melicchia, Potami, and Anaplades, was peculiarly marked by the violence of the symptoms, and the rapid and fatal termination of most who were unhappily attacked.

It may appear that, in detailing our proceedings in the lower district, I have dwelt at unnecessary length upon the system adopted for the eradication of plague; but I have been induced to enter into all the minutiae of our practice in detecting the source of contagion in every fresh case, and the rigorous manner in which it was followed up; for I am anxious that it should be clearly understood, that it is that link, which

unfortunately exists between the healthy and the infected, that demands our special attention, and which must be effectually severed ere we are enabled, with any degree of certainty, to cut off further danger from the propagation of contagion. Nor are we to be satisfied, that we have traced to its proper source, every new case, unless the fact is clearly demonstrated; otherwise we do little, very little indeed, towards overcoming that awful affliction. We should, therefore, never be at rest until that great object is obtained.

There is no doubt, by thus following up the disease, we shall be speedily enabled to root it from its most remote lurking places; whilst, on the other hand, if we allow the scattered source of the contagion to be in obscurity, every day, nay, every hour, will bring forth victims from the unheeding multitude; who, in spite of all our efforts, will find means to evade our vigilance, and incur danger themselves, at the same time that they spread contagion to all around them. We must therefore drag the monster forth, and his *nidus* must be effectually destroyed, as even the minutest particle, of a susceptible nature, becomes quickly impregnated with the contaminating poison, and at once endangers the health and safety of the whole community.

It is, unfortunately, a received opinion, that the mutual offices of society render it impossible, dependent as we are upon each other, to shut up

an entire community; but it will now, I trust, be admitted that this is not only a dangerous doctrine, but one strongly militating against humanity; a doctrine, the fallacy of which, experience has proved, for if we ever mean to arrest the progress of this frightful disease, this must be had recourse to without the least delay, as whilst any thing remains undone, we do nothing, "*Nil actum reputans dum quod superes-set agendum.*" Nor are we to allow ourselves to be swayed by the feelings or sufferings of a few, when opposed to the general good of the society in which we move, in the performance of this important duty.

Under such dangerous emergencies as those we have been recording, the strong hand and unnerved power of Government must be interposed, or the evil rapidly dilates itself, committing the most cruel ravages, and resisting every ordinary means employed against it; indeed, what is still worse, after a vast waste of lives we find ourselves upon the very ground where we set out, without having gained one single step towards the eradication of the disease. Plague admits of no middle course; and I know, from long experience, that, if the general principles here laid down are duly attended to, if all communication with a town or village is cut off upon the first appearance of plague, and if every family be shut up, and be compelled to handle

and to air the whole of their susceptible effects, there no longer will be a hiding corner left for the disease, for wherever contagion exists, unless destroyed by this process, it must declare itself; and where it breaks forth it will be crushed, and its source detected without danger of further propagation. The consequence would be, as we have practically proved, its almost immediate annihilation. Thus the sacrifice becomes partial, and the necessary restrictions would be but of short duration. All that we require is the faithful execution of those measures, without which we should be travelling in the dark and doing worse than nothing; but, when these are effected, all restraint can be removed with the most perfect security, at the expiration of a very limited period indeed. In order to obtain this great end, the inhabitants must be perfectly alive to their danger, and the members of every family must feel themselves responsible to the fullest extent of quarantine law, for the due fulfilment of their instructions. This should not only be done as a measure of public safety, but every individual should feel an interest in the execution of all public orders, and should guard against the infraction of them, not only on the part of those with whom they live, but also on the part of their neighbours, over whom, for the general good, they should necessarily have a watchful eye. To maintain this principle it should be

adopted as an invariable rule that, families occupying the houses immediately on the right and left of an infected house, if any do exist, are to be considered, from their contiguity, as suspected, and the inhabitants of such houses should be treated as such. At the same time that we have recourse to these necessary measures, we must be indefatigable in our exertions to prove that which is a fact; we must forcibly impress upon the minds of all that, in every step we are taking, we are alone studying their good. Unless we do so; unless the admission of this fact becomes a public feeling, every restraint will be considered as an act of severity, and evasion of established rules, under such impressions, will be deemed justifiable. The evils which would flow from impressions like these, are so numerous, and of so alarming a nature as to be even deserving of more consideration than my limits will authorize me to bestow on them; but what has been here said, will, I persuade myself, suffice to point out the more dangerous tendency, to counteract which, demands the very best exertions of such agents as may, on these occasions, be invested with public authority.

It will not, I feel, be received as an innovation upon the avowed object of this work, to notice briefly the general system which was pursued with so much success in the Ionian Islands, for provisioning the segregated inhabitants of

the different infected towns and villages. This system being founded upon the firm principles of the law that is known to govern contagion, simple in itself, was found in every instance to be attended with the happiest effects; and the history of the plagues that came under my own treatment, does not afford a single instance of disease attending the execution of this jealous duty—a duty that I have ever considered as one of the nicest points connected with what may be termed the plague system, as the most trifling inattention in its fulfilment throughout its various ramifications, might be productive of the most cruelly fatal consequences, by introducing disease into the bosom of families, at a time when they are apparently locked in the firmest security, and reposing the fullest confidence on the measures of Government.

The division of every town and village into districts upon the first appearance of plague, rendered the future provisioning of each a safe and easy task; and separate depôts were established in all, proportioned to the general wants of the inhabitants, the extent of which had been previously ascertained. The persons employed in conveying provisions, and in performing all other public duties of a similar nature, were selected from families the most removed from all suspicion of disease, from whom, upon engaging in the public service, they were immediately

separated, and underwent a quarantine of observation of seven days apart from each other: upon the secure termination of this quarantine, they were lodged together in the different districts where their services were required, placed under a military guard, and continued under a similar escort throughout the performance of their various occupations, the whole being under the direction of the superintendants of districts. All supplies were issued at fixed periods, and the tolling of bells announced the commencement and termination of these duties.

To carry into effect the general distribution, each family placed the necessary reservoirs for their supplies in front of their respective doors; nothing whatever of a susceptible nature was issued, not even permitted to remain in the magazines, consequently no danger could accrue from this service, particularly as no communication could possibly take place between the issuers and receivers. The more effectually to remove the most remote apprehension of danger, meat, eggs, fruit, and vegetables, were not received unless they had been previously steeped in water. The same precautions were observed in all communications between the district and general magazines; so that all the public authorities, as well as the different corps of employed persons, were each in separate quarantines: thus their individual safety was secured; and, considering the numbers employed, it is matter of

high interest to observe that none were attacked with disease. This exemption becomes still more extraordinary, considering the risk, even under every precaution, that was frequently incurred. My notes only furnish me with three instances of public officers, under any circumstance, being attacked with plague from the period of its origin, until its cessation at Corfu, and this happy immunity resulted solely from avoiding contact with every thing without their own doors. This, and this alone, was what was required: and it must surely be admitted, that it was purchasing safety at a very cheap rate. The fact is, in the very midst of plague, our first great aim should be to convert every habitation into a temporary prison; and when this is once effected, every difficulty ceases, every avenue to danger becomes sealed, and the speedy eradication of the disease ensured. These were our general measures of safety.

The means of prevention, as they particularly regarded those persons whose duties called them to hourly contact with the sick, and who voluntarily came forth from the different prisons for these services, were chiefly confined to the free use of oil and tarred dresses; in addition to these, a variety of instruments for dressing ulcers, &c. were used on the first appearance of plague; but those individuals, who from their being carefully initiated into the requisite manner of performing their respective duties, escaped

the first days of danger, lost in a very short time all apprehension, nor could they be persuaded to continue the use of their troublesome dresses during their more laborious employments, such as burying the dead, and transporting the infected goods; in a very short time they were totally laid aside by many, who contented themselves with besmearing their bodies with oil previous to contact with infected persons or effects. From the repeated use of oil, (which was now their sole preservative,) their clothes were in a constant state of moisture, and of those who persevered steadily in this practice, few were attacked. But many of these persons subsequently fell victims to their imprudence, by setting at nought the hourly advice they received, seeking comfort by substituting clean clothing for those of their well oiled dresses, which had so long defended them against danger; in most cases the consequences were such, as might reasonably be expected, inasmuch, as several who had served in every perilous situation for upwards of two months, were attacked with disease on being exposed to the influence of contagion, and a large proportion of them perished; their long intercourse with the sick proving, under such circumstances, to be not in the least beneficial. In these, as in many other similar instances, I had to lament that an over confidence was too frequently a passport to the grave.

CHAPTER VII.

Plague breaks out in Cephalonia, traced to have been brought from the neighbouring Continent.—Commissioners appointed.—Their Reports.—Arrival there of his Excellency the Lord High Commissioner.—New Measures taken in consequence of the State of the Disease at Comitato.—Plague Camp established at St. Pantaleone.—The System pursued there.—Measures taken at Comitato.—Expurgators jealously watched.—Necessity of preventing the Dissemination of Contagion through their Means.—Restrictions imposed upon them.—Temporary Difficulty of procuring Supplies.—Favourable Aspect of Disease.—An Attendant upon the Author, and other Persons residing with him, attacked with Plague.—Fever in the Villages of Messudagnia and Crotea.

HAVING, upon the extinction of plague in Corfu, performed, in common with the inhabitants of Leftimo, forty days foul quarantine, and after several days of our clean quarantine had elapsed, I was visiting the troops composing the principal cordon, when I was met by Major-General Sir Charles Phillips, who had arrived from head quarters, for the purpose of inspecting the troops, and directing some general arrangements. Sir Charles informed me, that since his arrival at Messongj, he had received dispatches from his

Excellency the Lord High Commissioner, by which I was directed to embark without a moment's loss of time for a particular service; that a gun-boat would be in readiness within four hours, and that upon embarkation I should receive my instructions. I was further directed to select a corps of expurgators to accompany me, with a proportion of camp equipage, which left me no room to doubt that I was called to further plague duties. This occurred on the 25th June of the same year.

We embarked the same evening, and my instructions directed me to proceed, without loss of time, to the island of Cephalonia, where the plague had suddenly broke out, making alarming progress. Notwithstanding every possible exertion to act up to the full spirit of my orders, I did not reach Argostoli, the capital of Cephalonia, distant from Corfu only eighty miles, until the 28th, about mid-day, when I disembarked at the Pratique Office, under the usual precautions, where I was received by the head of the Government, and most of the members of the council. All was confusion, and in the general alarm which prevailed, I was requested to take pratique. As I arrived in the capacity of Inspector of Health, it was the general wish that I should remain at Argostoli, there to carry on the duties of my office. A proposal of this nature I of course declined; in the first place, as I

was aware it was foreign to the object for which I was ordered to Cephalonia; and in the next, it was by no means consonant either to my feelings, or the sense I entertained of the service in which I was engaged. I therefore only remained at Argostoli that evening, and this delay was solely for the purpose of ascertaining the measures that had been adopted for the safety of the capital, and to make the necessary arrangements for the due provisioning of the infected district.

The origin of the plague of Cephalonia, unlike that of Corfu, was, fortunately for the country, early ascertained. Cephalonia is an island of considerable extent and diminished population, with large tracts of uncultivated land, destitute of the means for common subsistence, the annual produce in grain, bearing a proportion of not more than one-fourth to the actual consumption. On this account full one-tenth of the whole population proceeded twice a year to the neighbouring continent, to cultivate and reap the harvest of a foreign land—a custom sanctioned by the practice of ages.

To facilitate the commerce of the island, and the return of the peasantry, so long as the neighbouring continent was believed to be free from plague, quarantines of observation, not exceeding seven days, were considered sufficient to guarantee the public health; and this was permitted to be performed at many ports and creeks

remote from the capital, under the special superintendence, however, of officers of health, charged with the duties of each port, who were relieved every fifteen days.

By means of one of these ports, *St. Eufemia*, the plague was admitted into the island, as was acknowledged by the candid confession of the second individual attacked with disease, Antonio Venturato. This man declared that, shortly after the breaking out of the plague at Arta, in Albania, on returning towards the coast, on the road between Arta and Previsa, he, with his comrades, found the bodies of two Turks, who, a few hours previous, had died of plague; their bodies were stripped of every thing that was valuable by the said Vaugelin Venturato.

The whole of the party, consisting of thirteen individuals, reached *St. Eufemia* in perfect health, where they lived together, and continued free from sickness until the day previous to pratique being granted. The clothes and other articles, that had been taken from the bodies of the Turks, by Vaugelin, were, at the moment, carefully wrapped up in his great coat, and continued untouched from that period, about nine days, until the morning, on the afternoon of which Vaugelin was taken ill.

The indisposition of Vaugelin excited considerable alarm in the whole party; as they were well aware that the plague was raging at Arta,

and strongly suspected that the Turks were sufferers from that disease, as they knew that those very Turks had left Arta the preceding evening for Previsa, the knowledge of which induced them, at the time, to remonstrate against Vaugelin's having any thing to do with the effects of the Turks. Vaugelin's indisposition increased considerably during the night; but as pratique was to be granted early the following day, he was strongly urged, by his companions, to conceal his illness, apprehending from the circumstance, an increased quarantine. In this state he was admitted to pratique; and with much difficulty, although assisted by his cousin, Antonio Venturato, he reached his home in the village of Comitato; and on his arrival, was seized with delirium; a total prostration of strength was visible, alarming symptoms of debility quickly followed, increasing until the afternoon, when he expired strongly convulsed.

The body was examined by Dr. Metasca, a physician of the island, of talent and reputation, on the morning following the decease, who reported that there were no external appearances that could lead to any opinion of the nature of the disease; and quieted the minds of the public authorities, by giving it as his firm belief, that there was not the most remote suspicion of the disease of which the deceased died, being of a contagious nature. No means of precaution were

therefore thought necessary, nor were any had recourse to.

A few days after this event, Antonio Venturato was taken suddenly ill, and almost as suddenly died; his death, together with his confession, and the circumstance of several others having been attacked about the same time, produced considerable alarm, death following every attack within a very few hours. The Primates of the neighbouring village of Nechoiri, addressed a letter, on the 17th of June, to the Head of the Local Government, stating that an alarming disease of a highly suspicious nature had made its appearance in the village of Comitato, in the district of Erisso; that nine persons had died within a very short time, and that those, who were attacked, survived but a few hours, and praying that measures might be taken to guard the country from the disease with which the inhabitants of Comitato were afflicted.

Upon this alarming intelligence, a medical commission was directed forthwith to proceed to Comitato, to report upon the nature of the disease, and the progress it had actually made. Upon the arrival of the commissioners, they found little was left for them to decide upon, the clergyman (to whom Antonio confessed all the circumstances connected with his return from Arta) having fully communicated all that had been stated by the deceased, added to which, previous

to the departure of the members of the commission from the capital, official intelligence had confirmed the report of the actual existence of plague at Arta.

The body of Antonio had not been interred ; and on examination it was found covered with petechiæ, both black and livid, and of a prodigious size, with a carbuncle, occupying near the whole extent of the temporal muscle, and extending to the frontal bone.

The family of Panagin Lucca, consisting of four persons, had been attacked on the morning of the 17th instant ; and on the following day it was reported to the Commissioners, who were encamped without the village, that the whole were found dead. Their bodies were also covered with petechiæ.

The family of Panagin Venturato also, consisting of four persons, himself, his wife, and two children, were labouring under disease, the progress and termination were alike rapid and fatal ; with this difference from the former cases, that buboes were observed in each person of the unfortunate family, which was the first time these unequivocal symptoms of plague occurred.

The Commissioners, on the 18th, transmitted their report, praying immediate assistance, which was followed up by another, in more pressing terms, on the following day, stating that the disease was spreading fast ; that two other fami-

lies had been attacked; and that the wife of Stefano Stefato, and Andrea Ventura, had died with all the symptoms of a most inveterate disease. The Commissioners were unable to offer any assistance beyond that of recommending to the inhabitants the necessity of shutting themselves within their respective houses, and avoiding all kind of communication, as the only means that afforded security, until further public measures were adopted.

On the morning of the 20th, a third report, still more urgent, was transmitted to Government, in which it was stated, that eight persons had died in the previous night. On the afternoon of the same day, a detachment of military arrived from head quarters, three public officers, deputed by the department of health, accompanying them, who were charged with the general superintendence of the infected village, and vested with supreme power.

Such was the march of plague on its first breaking forth in Comitato, and the different families who were numbered amongst the first sufferers, were in the direct line of parentage with the unfortunate man, who conveyed the disease into the country.

His Excellency the Lord High Commissioner, reached Cephalonia, from Corfu, on a tour of the Islands on the 21st; and on learning that the plague had been imported into the interior, his

Excellency, after the necessary arrangements, proceeded for Zante, from whence the orders were despatched, that called me to the charge of the plague duties, to which, as they regard my own proceedings, I now again revert.

On the evening of the 29th of June, I arrived at the heights in front of Comitato, where the troops were encamped, and where the newly formed commission (consisting of two physicians and a gentleman of the law) had taken up their residence. Although apparently circumstantial details were daily transmitted to Government, I could not obtain any thing like satisfactory information, as to what was really passing within the cordon, the members of the commission having confided entirely to the reports of a priest of the name of Gabraele, an inhabitant of Comitato, who had undertaken to carry all their arrangements, for the extirpation of the malady, into execution.

The calls of humanity were too loud to admit delay. I therefore decided upon proceeding direct to the village. Here the scene was melancholy and distressing. In the general terror which was excited, the sick were heaped indiscriminately together, with the whole of their families, in a house selected for their seclusion, at one extremity of the village—where all, without distinction, were placed—the dead, the dying, the infected, and many even free from disease.

The state of the latter was of short duration, as there appeared little hope of escape, immured as they were within the walls of danger, and surrounded by a mass of contagion.

The consequences of these unfortunate measures were an attempt at concealment on the part of all attacked with disease; and, the more effectually to evade discovery, many buried their fathers, mothers, husbands, and children, in their gardens, or within their houses; indeed, such was the state of desperation to which they were reduced, that some were known to have thrown the bodies of the deceased relatives into their cisterns.

Far be it from me to attempt to attach blame to the gentlemen composing the commission; the picture is what is generally observed in most countries on the first appearance of this desolating disease.

Several partial arrangements were made immediately, tending to the security of such as were apparently free from disease, and a gleam of hope appeared to revive even the dying. My visit was certainly far from being free from danger, as the streets and avenues were strewn with rags and susceptible materials of every description. However, prudence guided our steps, and having completed my examination, I assembled the primates and clergy, strictly adhering all this time to the rules of quarantine, and fully

explained to them the danger with which the population of the village was threatened, and how much the safety of the whole island depended upon the good conduct of the inhabitants of Comitato. I further informed them, that they were, from their relative situations, henceforth, held responsible to Government for the faithful execution of the different orders they might receive from time to time. I directed them to make the same known to the entire inhabitants, that it was the intention of his Majesty's Government to grant to this unfortunate community every possible assistance; that this was the sole object of my arrival among them, and that I would share with them alike both the dangers and fatigues. I was well aware that, if I could once establish the principle of implicit obedience, an uninterrupted course of success would be the natural result of all our measures; therefore, as a preliminary step, the first proof of obedience I required, was, that the houses, streets, and lanes, should be thoroughly swept and cleansed before seven o'clock the following morning, and that nothing whatever, of a susceptible nature, was to be left in the streets. I instructed each family to sweep in front of their respective residences, and collect the materials either in a small box or basket, by means of a shovel, and placing them in a heap, either in the rear of their houses or in their gardens, as much as possible was to be con-

sumed by fire, and the remainder buried on the spot; particularly directing this work to be performed by the experienced of each family, keeping to windward of their task, and particularly to avoid stirring out of doors on this occasion, barefoot; the different families were also strictly cautioned against communicating one with another. Neither poultry, cats, or dogs, were allowed abroad, and all that could not be secured, were directed to be immediately destroyed.

Having thus far arranged for the cleanliness of the village, with a view of introducing, in safety, a body of troops for the maintenance of the laws of quarantine; about 8 P.M. I proceeded to the sea-side, with the hope of getting on board our gun-boat, which had sailed before our departure from Argostoli; but unfortunately she mistook the destined creek, and after nineteen hours of fatigue, exposed throughout the day to excessive heat, we found ourselves upon a deserted shore without even water to allay our thirst. Here we passed the night. Early the following morning the gun-boat reached us; and after some refreshment we examined the neighbouring shore, when I finally fixed upon the little bay of St. Pantaleone as the scene of all our future operations.

A small house at the water's edge appeared a desirable situation for an hospital, and a valley of some extent, gently sloping to the sea, offered

every accommodation for our camps; whilst the overhanging heights rendered the whole easily guarded and secure. The only difficulty was the distance from the village, and the badness of the road, or rather path; but to such difficulties I was now well accustomed, and the advantages of the position were so numerous, as to become irresistible. I determined to overcome every obstacle by patient perseverance. Our tents were accordingly pitched at the moment, forming three distinct camps, with various subdivisions. I lost no time in returning to Comitato, where I arrived about nine in the morning, highly gratified with the prudent industry of the inhabitants, who had fulfilled their instructions to the utmost of my wishes, offering a happy presage of what might be the ultimate result of our exertions.

That day, the 30th June, was dedicated to the arrangement of the hospital, to the occupying of every angle of the village with troops, and in moving them from the positions in which we found them, to the several points marked for the new cordons, to the placing the village in close quarantine, to the dividing it into districts, nominating the district deputies, and furnishing each with instructions, and to the arranging for the removal of the sick and suspected early in the following morning to St. Pantaleone.

The following is an abstract from my first

dispatch to the chief of the local government, on that melancholy occasion.

“ I feel myself called upon to state that, after
“ the most minute inspection of the infected vil-
“ lage and military lines, I cannot hold out any
“ well grounded hopes of the disease being in the
“ smallest degree checked, or that the measures
“ adopted have been such as to afford the smallest
“ security to the country ; on the contrary, I con-
“ ceive that, not only every individual within the
“ village of Comitato, but the inhabitants of the
“ temporary lazaretto, have had every facility of
“ entering the interior, and proceeding without
“ the least impediment to the very heart of the
“ capital.

“ I should be deceiving both you and the
“ public, were I to withhold my opinion that the
“ whole population is threatened at this moment
“ with the most imminent danger, and that no-
“ thing but the immediate adoption of the most
“ decisive and energetic measures, can avert the
“ propagation of this dire malady (if it be not
“ already propagated) throughout the island.

“ Under this feeling I cannot too earnestly
“ recommend that the strongest measures be
“ immediately resorted to for the general safety;
“ and to this end, I beg to recommend, first, that
“ a cordon be established, to cut off all possible
“ communication with the northern extremity
“ of the island, within the valley of St. Eufemia,

“ the present seat of disease, the right of the
“ cordon resting upon Pilaro, the left upon
“ Myrto; and further, that another cordon be
“ established for the protection of the capital, as
“ it is at this moment impossible to say what
“ part of the island is free from contagion: this
“ cordon, from the observation I have made,
“ should commence at the slaughter-house, run-
“ ning up the course of the old road, as far as
“ the small church, which stands at a right
“ angle with the new road, and which course it
“ should follow on either side, where shelter
“ may be most easily had, descending to the
“ valley opposite to the islands denominated
“ *Guardiani*.

“ To ensure the desired object of these cor-
“ dons, the posts should be at such distances,
“ and within such lines of communication, as
“ would render futile all attempts to pass them.”

The letter then notes the number of troops necessary for each post and cordon, and proceeds to state—“The troops which occupied the heights
“ in the neighbourhood of the infected village,
“ marched this morning, a portion to occupy
“ Comitato and the adjacent lines, and the re-
“ mainder to guard the camps and plague hos-
“ pital at St. Pantaleone, to which place the
“ sick and suspected will be removed without
“ loss of time.”

This state of things clearly points out the

absolute necessity which compelled me to remove as many persons as possible, without even waiting until our depôts of provisions were established. I was in hourly expectation of hearing of further calamity in the island; so much so, that the same letter states: "So soon as these arrangements are fully carried into effect, strong, and I trust, effectual measures shall be had recourse to, to ascertain the true state of health of all the villages within the valley of St. Eufemia, which can only be known when the whole are placed in the strictest quarantine, and by compelling every family to the daily handling and airing of the whole of their susceptible effects of whatsoever description."

The letter then proceeds:

"The formation of camps, and the removal of the principal part of the military force to the sea-side, demands that a depôt be established on the spot, to ensure regular supplies; and I most earnestly entreat that all demands for provisions for this district be promptly attended to."

I was assured by the head of the government, that every attention would be paid to all my requisitions; but, notwithstanding the best efforts, delay unfortunately occurred. We had from the first moment husbanded all the means of supply found in the village; but such was the unforeseen delay in forwarding our first demands,

that I was compelled to call on the inhabitants of the neighbouring villages for bread and wine, to meet the more immediate wants of those encamped.

We were yet without health guards, and such was the dread of every class, that it was almost next to an impossibility to procure persons for these duties, which for the moment embarrassed us considerably.

The removal of the sick and strongly suspected, over a range of rocky mountains, was at once an arduous and delicate undertaking. The troops were yet unaccustomed to the service, and consequently could not be left to themselves, as the most trifling inattention would inevitably be productive of the greatest evil. I was, therefore, here, as on former occasions at Corfu, compelled to accompany each escort during the first days, until the troops had learned to estimate and to avoid the danger to which they were exposed in this new and trying duty. Nor did this service end here: on our arrival at camp, we were obliged to accompany the whole, family by family, to their respective tents; in this duty I received the most humane assistance from Captain Zerbi, of the Royal Corsican Rangers, who commanded the cordon. Mr. Masenti, a gentleman sent by his Excellency to superintend the expurgation, also granted his assistance, and our servants, under our immediate direction, were

compelled (from the non-arrival of proper persons from the capital) to distribute provisions and water to every individual within the camp lines, even the sick included.

From the inadequacy of our means, I found it utterly impossible, notwithstanding all our efforts, to remove, as I hoped, the whole of the suspected from the infected village. I was therefore obliged to content myself with the removal of all such as came under the head of strongly suspected; and to remedy as much as lay in our power, the danger which was to be apprehended from allowing a large number of suspected to remain in the village, our sentries were stationed so as to cut off all communication between the different families. If disease therefore still existed in the village, which was scarcely to be doubted, the discovery could not be protracted, as medical inspection of every individual composing each family, took place morning and evening at the doors of their respective houses: the disease could not therefore pass the walls within which it had broken out.

As I was fully prepared for fresh cases, so long as a single suspected individual remained within the village, I became the more anxious to be enabled to complete the work I had begun, the result of which I felt was of the highest public import; for, if success, (which, after so many

examples, we could scarcely doubt) again followed our operations, it could not fail to confirm the efficacy of measures, which we had so long and so happily acted upon: at once offering to the public a fixed and uniform system for their preservation, under a similar calamity.

In my hurry to arrest disease, I found my hospital filled with sick, without medical assistance. Independently therefore of my other duties, I was called upon personally to attend them until the arrival of Doctor Bormelli, who had served with me at Corfu during the plague in the lower district, and for whom I had written immediately upon my ascertaining the true state of affairs at Comitato. In Doctor Bormelli I found an able assistant, bold and enterprising; having been long accustomed to a pest hospital, his services were rendered valuable, not less to the individual, than to the public at large.

Notwithstanding this serious, but necessary addition to my duties, matters were placed thus early in a fair train for a favorable termination. There was no lurking corner now left for this insidious malady, it must declare itself, as every article of a susceptible nature was hourly handled by the different individuals of each family, and all were placed in the safest and most convenient situation for daily exposure to the air, without

endangering any communication with the effects of their neighbours*.

The streets had been early rid of all danger. The troops had entered the village in perfect safety, and, as far as could be ascertained, disease itself was removed. The hospital, a temporary receptacle which I have already noticed, was broken up, and the general expurgation was instantly commenced; a corps of able expurgators, all of whom had had the plague, satisfied me upon this point, which was made still more secure by the unceasing exertions of Lieutenant Meek of the 14th Foot, who commanded the troops at Comitato, and who kindly volunteered for the superintendence of this duty. Thus the machine was set at work. All that remained to be done, was the removal to camp of the other families, who were under suspicion, whenever a sufficiency of provisions arrived. Our camps were alike reduced to system, classed according to the different degrees of suspicion, the whole surrounded by walls, and so guarded by sentries, that each tent might be considered as a separate lazaretto. Every hour now began to change

* Where a doubt was entertained of the existence of plague in any dwelling, the family was by no means compelled to handle and air their susceptible effects, the act was optional; but if it was declined, from an apprehension of danger within their own circle, proper persons were provided for that service.

the gloomy aspect of affairs, and both camp and village promised early to repay us for all our trouble; yet considerable anxiety still existed, as our supplies had not arrived. It was with the utmost difficulty that I could provide for our hospitals and camps, and there were still more than one hundred persons in the village whom it was necessary to remove.

New cases of plague occurred daily in our camps, but this was not more than I expected, particularly when it will be remembered how many persons were heaped with the sick; upwards of forty at the moment, free from disease, having been removed, the morning after my arrival, from the wretched dépôt where I found them. To rescue these unfortunate beings, if possible, from the impending danger, was an object of our greatest solicitude. A small dépôt of unserviceable hospital dresses and bedding, with which I was furnished, enabled me, on the arrival of the suspected at camp, to supply the whole with a portion, having previously had their persons shaved, well washed in the sea, and lightly spunged with oil: the whole of them were then placed under medical treatment, which consisted in a gentle purgative, followed by mercurial inunction, proportioned to the age and constitution of each individual. The mercury was persevered in morning and evening, until the system was under its influence; this

practice was only resorted to in the cases of the strongly suspected, who of course were received without any symptoms whatever of plague being on them*.

Between the 1st and 2d of July, nine of the unfortunate individuals whom I found labouring under disease, died, without its being in my power to palliate a single symptom under which they were suffering. Within the same period, four fresh cases appeared amongst the suspected left in the village; and on the evening of the 3d, and on the morning of the 4th, two other families were attacked. Two cases appeared in two different tents in the strongly suspected camp, and four deaths occurred in hospital.

These events were far from encouraging; but what was most distressing, was my inability, from the continued want of provisions, to remove the whole of the suspected from the village.

The families of those attacked in the village, were necessarily removed, and immediately underwent camp discipline—namely, shaving, washing, and clean clothing.

Those in the tents where plague appeared, were again subjected to the same process; the

* The efficacy of these means, with the medical history and treatment of the plague in the Ionian Islands, will be speedily submitted to the profession.

tents struck, the ground on which they stood immediately purified, by destroying every trifling particle of a susceptible nature that could be detected, and by the turning up of the whole of the soil. In this, as well as every subsequent case, every individual belonging to a family infected, was placed apart, one from another, in separate quarantine, our means permitting this salutary precaution.

I had the satisfaction to observe, that the expurgation of the village was now advancing beyond my most sanguine expectation, and the principal sources of danger were removed. Indeed, on the 4th, I was enabled in my dispatch to announce that the general expurgation was in a most forward and promising state; but, from the number of bodies every where to be met with in the infected district, I was induced to believe the deaths had been by far more numerous than were stated in the reports of the commission. The bodies buried were scarcely covered with earth, and were dispersed almost every where, without any consideration of the fatal consequences that would naturally follow, unless in time remedied.

On the breaking out of disease, and upon the first alarm, many families had fled the village. Of their fate we were ignorant, a circumstance that could not be lost sight of, not only from humanity towards the individuals themselves,

but from a feeling of the danger to which those persons (if unfortunately they had carried disease with them) would expose the whole population. From motives of prudence, and the more effectually to prevent the defeat of the object I had in view, I kept my intention respecting these persons a profound secret. On the morning of the 4th, having on the preceding evening received a small supply of provisions, I determined upon carrying my plan into immediate execution; and accordingly I transmitted instructions to Capt. Timpaldo, (an intelligent and zealous officer of the native militia in command of the outer cordon,) to extend the whole of his force in such a manner, as, by a rapid movement, to surround the valley where I was informed these people had taken refuge, directing him gradually to advance, and to diminish his circle until all within the valley were effectually secured. I also cautioned him to prevent all communication between the different parties of peasantry he came up with. Such was the precision with which this duty was performed, that, in the space of four hours, there was not an absentee, and all were assembled in safety within our camp lines. I was now tolerably secure, there were no stragglers, and the inhabitants remaining in the village were hermetically sealed within their respective dwellings.

At the time that I forwarded the orders to

Captain Tipaldo, I called upon the Primates of Comitato for a list of all absentees from the village; which, upon perusal, I found precisely to correspond, with the exception of Antonio Chissaffi, who had died of plague. The fate of this poor man was unknown to the Primates, and the body was discovered by a party of expurgators, whom I detached for the purpose of examining the different open huts dispersed about the mountains in the neighbourhood of the village.

Another source of danger, at this period, presented itself. On the evening of the 4th of July, a confidential communication was made to me, stating, that a quantity of goods, supposed to be infected, had been concealed, upon the first appearance of plague, under the apprehension of their being ordered to be destroyed. As I had every reason to confide in this report, all our efforts were forthwith directed to the discovery of these alarming deposits. This circumstance caused me much anxiety; nor was it diminished, although assured (by many of those whom I believed to be the most deserving of credit amongst the inhabitants) that these deposits could be by no means extensive, the misery of the peasantry being extreme. A single rag, imbued with contagion, was sufficient to produce disease, and as long as it remained concealed, so long would the country, notwithstanding all our measures, be exposed to danger.

Upon my arrival at Comitato, I found the inhabitants of the village a far different class of beings to what I was led to expect from the nature of the information I had obtained, as well as from the strong measures of precaution the commission deemed it necessary to adopt, in order to guard against any opposition, on the parts of these unfortunate people, to the orders of Government. I was also given to understand that I should never succeed in my plan of taking them from their houses, and establishing them in camp; in fact, they were pictured to me as a turbulent, savage people, who required the most delicate treatment. How different was their conduct, when I explained to every individual, assembled, in front of his respective residence, my intention of conducting them to camp, and the motives of Government for this order: one and all, with hearts full of gratitude and confidence, assured me they would follow me wherever I chose to take them. I, therefore, under the existing emergency, trusted much that, by the force of persuasion, and promise of reward, I should be enabled to induce these unfortunate people to confess where they had secreted their property; and in my instructions to the officer commanding at Comitato, I called his attention to that most important duty. My letter addressed to him on the occasion, states, "The dread occasioned by burning the houses of the infected, I

“ can say, from experience, would operate forcibly
“ on the minds of the unfortunate sufferers, whose
“ property, however necessarily, was destined
“ to the flames, and urge them to that rashness
“ from which we had now so much to apprehend;
“ promises, as well as threats, will effect
“ much with the description of persons we have
“ to do with; and the papas or priests may be
“ employed with some prospect of success. I
“ wish you to make it known, that such as make
“ discoveries shall be immediately and liberally
“ rewarded, independently of which, the full
“ value of the articles so discovered, shall be paid
“ to the proprietor, should the public safety require
“ the destruction of the same.”

No goods, of whatever description, and by whomsoever discovered, were permitted to be removed by others than expurgators; and until their arrival, sentries were directed to be stationed so as to prevent all communication with the place of concealment.

Whilst these measures were pursuing in the village, I was not less attentive in my endeavours to urge the infected and the suspected, both in hospital and in the camps, to a general confession. From my having lived with these persons, since the hour that I conducted them from their homes, I felt I had no small share of influence amongst them, of which I availed myself to impress upon the minds of all, the awful conse-

quence which would inevitably attend their withholding the most trifling article from our knowledge.

The great object was to inspire a general confidence and faith in the proclamations issued on the occasion, by the local Government, and to make them believe that equal attention would be paid to the security of their property as their lives; the safety of the former appearing to be of far greater moment to them than their very existence.

Under this impression, and with a view of striking at the root of all danger, from infected goods, I established a public depôt, similar to that formed at Corfu, for the reception of the susceptible effects of all who might unfortunately be attacked. I selected a church within the village, for this service, directing that, on the appearance of plague, in any house, the individuals, free from disease, were to select such articles, of a susceptible nature, as they absolutely required to take with them to camp, from such as had not been in use, or not touched for some time previous to the existence of plague in the village, prohibiting all contact with those articles most likely to have been infected. The transport of these articles devolved upon the expurgators, after the departure of the family for the hospital, or for the strongly suspected camp; further, to guard against the propagation of

disease, all such goods were conveyed either in boxes or bags, well secured, sentinels were placed over the store, observing the necessary precautions for their own security during all communication made by the expurgators.

As the expurgators, from the nature of their employment, could not be considered otherwise than as so many vehicles of contagion, they were consequently as jealously guarded in their respective duties, as individuals labouring under positive infection. An isolated house was chosen as the residence of the expurgators, and every outlet to the same was strictly guarded. A superintendant conducted them to and from their daily duties, under a military escort. These guards were invariably placed full thirty paces to windward, and both superintendant and guards were responsible, that nothing whatever, of a susceptible nature, was carried by those men, in a loose or unconnected manner, which might, in the most distant degree, communicate contagion, from being carelessly dropt in the streets, or carried off by the wind. In fact, the streets, as well as the road, leading to the camps, were an hourly object of attention during the general expurgation and removal of the infected and suspected, the minutest particle subjecting to the most imminent risk all those whose duties compelled them to be abroad at all times, both day and night.

The restrictions thus placed upon the expurgators, must ever be considered as a primary object, constituting a very necessary part of our plague discipline; for, whilst we look upon these men as a useful and requisite class of people, it cannot be too strongly impressed upon us, that they are more to be dreaded than the contagion which they are called upon to eradicate, and that they demand being treated accordingly: indeed, this truth was never withheld from them, and that they were well aware, that any attempt, on their part, to compromise the public safety, was directed to be on the spot punished with death. This may be deemed by those unacquainted with the delicate duties of expurgators, as a severe discipline; but when we reflect upon the general character of the persons employed in this service, more especially on the first appearance of plague in a country, and the consequences which might result from the escape of a single expurgator, or from his clandestine communication with the inhabitants, or an attempt to conceal property, which might, at a future period, be productive of fresh calamities, the propriety of such severity will readily be admitted. A melancholy instance of a breach of trust on the part of an assistant expurgator, occurred to us at Argirades in Leftimo. The village had been a considerable time free from disease, and this man was charged with the superintendence of

the expurgation, and every confidence reposed, not only in his fidelity, but in the faithful and cautious execution of the trust reposed in him ; he ingratiated himself into the good opinion of the whole of the primates and respectable families of the place, and in the course of a short time was received by them as a confidential friend, which induced them at length to receive him night after night clandestinely in their houses, under an impression of perfect safety. The wretched being, owing to the loose manner in which he performed his duty, was attacked with plague ; he fell a victim to the disease, but not until he had communicated it to the whole of his friends ; the consequence was, that upwards of thirty persons became sacrifices to this mutual violation of the law. Thus we see the necessity of jealously guarding all such as are employed in this truly delicate duty. This protection of the public health, by no means interfered with their comforts ; their wants were liberally supplied, at the same time that precision in the execution of their duties was exacted ; and indeed to that degree was it carried, that every movement resembled a military parade, the whole being directed either by the bugle or beat of drum.

Returning to our subject, as the dépôt for infected goods, established in the village of Comitato, could only be considered as a temporary

security, and the village itself could not be looked upon as free from danger, so long as this depôt existed, I caused a small wooden building to be erected for the reception of all infected goods; this building was contiguous to the pest hospital on the sea-side, and at the same time contiguous to our camps, where these infected articles were to be removed to, upon the final cessation of disease in the village. This transfer of infected goods was subsequently conducted under the same system of precaution as marked every movement connected with plague. In truth, such was the importance attached to every thing of this nature, that every transfer of persons or effects was made with solemn steps, and in awful procession, by which means contagion was kept within due bounds during these operations, and many of the evil consequences that too frequently occur on similar occasions, were evidently prevented. Thus, wherever plague made its appearance, in house or tent, there was a positive assurance of its immediate concentration. It was not enough that orders to this effect were issued, but I personally saw that they were obeyed: for until I was well satisfied that every individual employed had practically learned his duty, every service of danger was performed under my own immediate superintendence, which not only inspired a general confidence, but likewise a general spirit of emulation.

The small supply of provisions which reached the camp on the evening of the 3d, and which induced me to collect the fugitives from Comitato, seemed to threaten us with new disasters, as I had nearly exhausted the resources of the district in supplying the wants of the different camps, which now amounted to two hundred and thirty individuals, and there appeared no prospect of the arrival of the promised supply. On the 6th I was called upon to urge our wants in the strongest terms to the local government, deeply lamenting the event, as it not only impeded our best endeavours, but threatened to expose a class of people to the severest fate, who, from their general good conduct, implicit obedience to the orders of government, and patient submission to all their sufferings, demanded the kindest commiseration and most humane attention.

The delays in sending provisions, evidently arose from the very great difficulty of transporting them by land, and the uncertainty of sea communications.

Provisions were all I required, as every arrangement for the final annihilation of contagion, was now in full force, leaving me little to apprehend. There were certainly many strongly suspected cases yet in the village, but as every house presented a perfect lazaretto, allowing even that the disease did make its appearance, it must

have been immediately crushed. Here there was no escape. Nevertheless this state of security was not fully satisfactory, as the system I had laid down could not be considered perfected, so long as any individual, labouring under the most remote suspicion, was without our camp lines.

I have been thus far particular in dwelling upon our wants, as I am desirous of shewing the importance of pursuing, with undiminished energy, those general plans requisite for the eradication of plague, not permitting for a moment partial wants to embarrass, much less to paralyze, our efforts for the public safety.

At this period I received a dispatch from his Excellency Major-General Smith, Lord High Commissioner *pro tempore*; wherein he expressed the deepest anxiety for the safety of the inhabitants of Cephalonia, calling upon me to report upon the actual state of matters, to state the measures which had been adopted for the prevention and eradication of disease, with my opinion as to the probable result. At the same time the Major-General did me the honour to add, how much confidence he reposed in the means I might think necessary to employ.

My reply, which was under date of the 7th of July, proved highly satisfactory, as it thus early held out well grounded hopes of the speedy extirpation of our enemy.

By the same conveyance I received a letter from my much respected friend Major-General Sir Charles Phillips, into whose hands (upon his arrival at that island), I had delivered the charge of the infected district of Leftimo in Corfu, continuing to serve under him in that particular service until the period of my departure from the island, and until all disease, as has been already seen, was at an end. The General's letter was replete with useful lessons of precaution, and leading me to those particular measures to which we attributed our success at Corfu. His chief anxiety was lest my zeal in the cause in which I was engaged should outrun my prudence, and endanger my personal safety. An extract from my reply to Sir Charles Phillips may not be uninteresting, particularly as it conveys an exact idea of the progress we had made towards the eradication of the disease.

“ I feel you will be pleased to learn that mat-
“ ters begin to look well here. I did not lose a
“ moment in applying the only effectual remedy
“ to this greatest of all human calamities;
“ scarcely had I been twenty-four hours on the
“ island, when my hospital and camps were
“ established.

“ Comitato, the seat of plague, containing
“ about seven hundred souls, presented a horrid
“ mass of disease. Such was the alarm, that no
“ effectual assistance had been granted to the

“unfortunate sufferers; and, as might naturally
“be expected, I found them in a wretched and
“miserable state.

“Fortunately the dread of the inhabitants, as
“well as that of every individual, I may say, in
“the island, was great, and this was not only
“their own security, but the only security the
“country could boast of.

“As to a cordon there was none; a few tents
“were pitched here and there upon the moun-
“tains. Nevertheless it appears the disease did
“not pass the village. If this be true, which
“soon will be ascertained, the malady will be
“speedily terminated.

“I am in great hopes the whole disease is
“concentrated within our camp lines, where it
“will receive that discipline so desperate an
“enemy merits.

“The inhabitants of this district are mise-
“rable in the extreme, forming a striking con-
“trast with the rich proprietor of Leftimo.
“They are truly wretched in every sense of the
“term, and it is altogether a horrible country,
“nothing to be seen but mountain overhanging
“mountain, rocky and almost inaccessible, surely
“never destined by nature to be the haunt of
“man; no vegetation, no even a bush to shade us
“from a vertical sun.”

This is a correct picture of the general state
of affairs as they existed at that period, and the

result sufficiently proved that the hopes, thus early expressed, were well founded.

The numerous flocks, both of sheep and goats, belonging to the inhabitants of Comitato, the principal property and source of existence to this peasantry, caused me both anxiety and alarm. They were wandering about the neighbourhood under the charge of shepherds, who were known to have been in daily communication with their families at Comitato, and my alarm was considerably heightened by the information which I received, that one of the shepherds had been infected by communication with a family labouring under plague in the village.

To secure the property of the inhabitants, and at the same time to obviate the danger which might arise from these animals wandering with their keepers about the country, unsafe as they were from the probability of some of them being the vehicles of disease, I divided the flocks, and established fixed boundaries for each, calling upon the proprietors to nominate the respective keepers; these keepers I divided into corps of ten, giving to each a chief approved of by the primates, and I held the chief responsible that no intercourse took place between their respective flocks; they were also instructed to examine their men twice daily, and to report the least appearance of indisposition amongst them. As the whole were placed within a military line,

there was little danger of their passing the prescribed limits; they were conducted twice a week to the camp barriers, where they underwent medical inspection, one half attending in the morning, and the remainder in the afternoon.

On the evening of the 6th, our camps exhibited a mass of disease, plague appearing in four tents in the third and fourth divisions of those that were alone under simple suspicion; two tents of the strongly suspected presented a similar appearance. The infected in all were immediately removed to the hospital, and the remainder underwent the usual system of washing, and a thorough change of clothing. Every individual under this accumulated suspicion, was closely watched, and the preparatory system of medical treatment was pushed with increased vigour. The tents were removed for purification, and the ground upon which they stood was thoroughly cleared, and free from every particle of a susceptible nature, according to the established rule in such cases.

The appearance of plague in the camp of the simply suspected will be readily accounted for, when we call to recollection the difficulty that naturally arose in distinguishing the different grades, heaped together, as we found them, on our first entrance into Comitato. Direct communication between the unfortunate persons

attacked, and others of their families labouring under plague in the village, was subsequently most satisfactorily traced; although, as matters at the moment stood, it availed little, each tent as we have seen forming in itself a separate lazaretto, from whence there was no escape.

These measures were attended on this occasion with the happiest effects, two-thirds of the whole of the persons exposed to the contagion having escaped disease, whilst of the many admitted from camp into hospital, a large proportion were in a fair way of recovery. A plentiful supply of provisions enabled me, at this time, to transfer the remaining families in the village to camp, when all external danger was at an end, as I had now only to combat with that which was within our lines, and this would necessarily soon terminate, as disease was alone to be apprehended from the human frame, and its peculiar nature would not permit its lying dormant in the constitution, nor could it go beyond the individual, as those under strong suspicion were so separated, that further risk was at an end.

The means resorted to for the discovery of concealed effects, after a little perseverance and some exertion on the part of the clergy, proved successful; within a very few days all was within our grasp, and securely lodged in the camp dépôt.

Nine days only had elapsed from the com-

mencement of our operations, when there remained, in all the camps, but four families, for whom I had the least apprehension, as upwards of 360 persons, who had been under different degrees of suspicion, had undergone the strictest discipline, leaving no room whatever to doubt their safety, the whole having been plunged daily into the sea, without regard to age or sex, and all of their susceptible effects having also been daily immersed in sea water, for the space of two hours, and subsequently exposed to the heat of the sun, the thermometer in the shade on the beach standing at noon at 88°. For effecting these different objects, each camp had its stated hours for each sex, as well as separate places, according to their different degrees of suspicion, and the inhabitants of each tent were marched to and from the sea-side, in separate bodies, by health guards. It was the special duty of these guards to prohibit all communication between the different parties, and to prevent the smallest rag from being left behind, or thrown into the sea by the suspected, and subsequently to conduct the persons in security to their respective tents. The whole of the ground over which the suspected marched, was examined by myself morning and evening ; this became the more essential, as the greater part of the ground was necessarily traversed by those employed in daily supplying the different tents with provisions. It will of

course be understood that the persons for whom sea-bathing was directed, were not under any sort of medical treatment, as they were not ranked under the higher class of suspected, a class solely applying to such as had direct communication with persons labouring under disease, or effects presumed to be contaminated, or those persons living in a house where plague was actually known to exist.

In the favourable manner I have now related were matters advancing, when on the 9th of July I was called from camp to the bay of Samos, distant about seven miles, for the purpose of an interview with the Count Rivarola*, who was invested with supreme powers over the health department of the islands, Cephalonia, Zante, and Ithaca, by his Excellency the Lord High Commissioner. After some general arrangements, I returned, accompanied by Captain Zerbi and Mr. Mazenti. A strong and contrary wind prevented our reaching the bay of St. Pantaleone until late the same evening, where the surf beating high, rendered our landing difficult. In this dilemma a soldier of the Cor-

* Count Rivarola was selected for this duty, as a person best fitted for the important charge, from his long experience in matters of plague, and whose exertions during the existence of that malady in Malta, were both conspicuous and successful.

sican regiment, who was one of our confidential attendants, came alongside the boat, and carried us each alternately on his shoulders to the shore. Although the distance was short, and my supporter possessed of considerable bodily strength, I felt him stagger beneath me, and it was with difficulty that he succeeded in depositing me safely on the shore. I observed it at the moment, but it escaped all further attention, attributing the circumstance to the force of the waves, and the unevenness of the beach. At day-break on the following morning, I rode across the mountains to visit the inhabitants of the village, in strict quarantine, in consequence of the appearance amongst them of a remittent fever; from which they annually suffered, and the appearance of this formidable malady at the period when the plague was not very remote, inclined me to resort to the measure of quarantine, notwithstanding the assurances I had from the native practitioners that this fever was annually prevalent in those villages, and had more than once attracted the attention of Government. Under existing circumstances, I determined upon investigating the nature of this disease, and after the closest inquiry, I found there was no room to doubt the truth of the information which I had obtained. So far from the disease being of a malignant type, it run its course without producing any serious inconvenience, terminating

favourably by profuse perspiration, from the 5th to the 7th, and sometimes protracted to the 11th day. But although the disease had been peculiarly mild, and totally free from mortality during the season I visited those villages, yet some years it had been attended with very considerable mortality, and from causes that appeared to me perfectly satisfactory.

On returning to camp about noon I was informed that Fino, the soldier, who had conveyed us to the shore on the preceding evening, was extremely ill, and complained much of headache; there was something in the manner both of our guard and servants that bespoke danger; the man was immediately brought before me; the nature of the disease was too evident; plague was legible in his countenance. He had just risen from his bed; he staggered and sought support against the wall of a shepherd's hut, close to my tent; he was perfectly sensible of his situation; his countenance was shrunk, his eyes were suffused, his voice was feeble, his breathing hurried; there was a considerable degree of anxiety, which he in vain endeavoured to conceal; to me it appeared evident that his sufferings were much more severe than he acknowledged; the poor man's anxiety was great, feeling (as he said he did) for the danger to which we were exposed. He did not know to what cause to attribute his illness, but a little inquiry soon

satisfied me on this point, as it appeared that he entered the strongly suspected camp the evening preceding his attack, and assisted one of the health guardians in conducting some camp arrangements, relative to a family that had been removed to the hospital, every member of the same having been attacked with plague; this was no less than the family of the priest, Papa Gabraele, whom I found officiating for the commission upon my arrival, and who had the temerity to bury his own son in his kitchen, and to conceal from the authorities that confided in him, the state of his family. This fact was not discovered until the wretched man himself was seized with the disease.

Anxious for the safety of the unfortunate man, the object of our fears, and willing to grant him personal assistance, I placed him in the small hut close to my tent, with a sentry at the door. The symptoms, I regretted to observe, left me very little to hope; however, I was determined to leave nothing undone that in my judgment might be productive of benefit; his sufferings throughout the day were severe, but to all my inquiries he gave the most flattering answers. Disease made hasty strides, notwithstanding all our efforts, and four buboes occupying both armpits and groins, gave early warning of his fate. On the third morning he died. The night preceding he was delirious for some hours; towards

morning he was perfectly sensible, and as usual, at all my visits, he repeated his inquiries for our safety, and that of his fellow servants, and appeared perfectly composed on being assured that all continued well.

The knowledge of this unfortunate event produced very considerable alarm, not only for our safety, but for that of the whole cordon; although, in my report to Major-General Smith, I merely noticed the event as an ordinary occurrence, unwilling to excite uneasiness for our safety at a moment when our services were of the first importance to the cause in which we were engaged. The disease was most providentially arrested, and although the deceased slept in the same tent with the other servants, and had carried us upon his back, and had even attended us for a short time while he was labouring under disease, yet every one escaped.

That the unfortunate man was under the influence of disease at the very hour that we were exposed to so much danger, is not to be questioned; but happily for us, before he had carried us on shore, he had been well drenched with seawater, but still there were many other causes for danger through his means.

The moment of the discovery of plague within our own circle was naturally an anxious one for all; however, I was happy to observe, in every individual, that manly firmness which gave me

the fullest confidence, and enabled me to carry the strongest measures for our safety into immediate execution. Our first attention was naturally directed towards our persons; and, as there was strong reason to dread that our apparel at least might be infected, and if we had hitherto escaped personal contamination, our clothes might ultimately prove the source of danger; I decided that every thing of a susceptible nature, belonging to each individual, except such articles as we had the strongest reason to believe had been removed from the danger of contamination, should be, on the spot, destroyed; and it was arranged that we should subject ourselves to the system, usual on such occasions, that of washing, oiling, and medical treatment. The torch was soon put to the pile that left us nearly in a state of nakedness, without a bed to lie on, or a tent to cover us: there was no time for hesitation; the danger was too near, and we were well satisfied that these were the only measures calculated to ensure our safety. This necessary duty performed, it behoved me to place every individual, both masters and servants, in strict and separate quarantine. As we had never communicated with the cordons, or with any individual beyond our barriers, (except in the instance of the unfortunate event which led to the disaster,) all danger was confined to ourselves. The servants were placed under a sentry, and although

our own quarantine naturally prohibited all communication, it did not, in the smallest degree, interfere with our respective duties. Fortunately, the strong measures we adopted for our own safety, proved successful, not one amongst us having been attacked with plague.

It was gratifying to observe that the four families in camp, for whom I was under the most serious apprehensions, passed their period of danger in perfect safety; thus, with the death of our servant, terminated the plague of Cephalonia.

Fourteen days only had elapsed from the period of our arrival, until the total extinction of the plague; during which short, but anxious period, it will be readily believed that no exertion was spared, that every one alike laboured, and that no personal consideration, for a moment, intruded to impede the great work that had been intrusted to us, offering another convincing proof that plague, with matured measures, ordinary means, and decisive execution, can be speedily and effectually eradicated from amidst a community.

As connected with the foregoing statement, there are two points which I wish my readers particularly to bear in mind. First. That by the means adopted in the village of Comitato, plague was there arrested. Second. That contagion, uninfluenced by change of air, continued daily to

develope itself in camp, until systematically destroyed, without extending itself in a single instance beyond those immediately exposed to its influence; and who, from special causes, were under suspicion of danger.

The rapid termination of plague at Melicchia, in Corfu, and at Comitato, in the Island of Cephalonia, are not the only assurances of the efficacy of the general system adopted; unwilling, however, to swell these pages by a repetition of similar events, I have refrained from entering into the detail of the plague in the villages Ringlade, East and West Neochori, St. Demetrio, and Caspades, in the district of Leftimo. In the four first mentioned villages, contagion was positively annihilated on its very first appearance, never having been permitted to pass the threshold of the house where it was unfortunately introduced; and in the latter, three houses only were attacked ere its progress was arrested; and in all, as well as on the recent occasion, it is gratifying to my feelings to state that I myself, personally carried those measures into execution, by which so many of our fellow creatures were rescued from an untimely grave.

It is a curious fact that the several cases of plague which occurred in the villages just mentioned, were, if possible, of a more formidable nature than any we had to contend with, ushered in with the most unequivocal symptoms, a pro-

vidential circumstance for the inhabitants, and that to which their ultimate security must be attributed.

The plague of Cephalonia, in its general character, offered nothing peculiar, differing in no one symptom from the disease of Corfu. Certainly, no recoveries marked its first appearance, death following every attack until our arrival, and fifty-nine persons were hurried out of the world in a very few days; but the melancholy situation in which we found them will not be forgotten, and will satisfactorily account for this extraordinary mortality.

It is a commonly received opinion, that plague varies in its character from the period of its original developement until its final termination; gradually advancing from its first stage, until it reaches its zenith, and that after that particular period, the disease becomes far less fatal, the malady in its decline assuming a peculiarly mild form. On this subject I will, for the present, confine myself to merely observing that, the latter cases, which occurred in Leftimo, were marked by a degree of malignity equal to; if not even greater, than any we had witnessed from the first commencement of the disease. That the same was the case at Cephalonia, we cannot have a more convincing proof than the unhappy case which closed the scene. These terminations of the disease, it must be admitted,

are very unlike the close of an epidemic visitation; and further, the plague, both in Corfu and Cephalonia, like all diseases depending upon a specific contagion, early developed itself in the system, no instances ever coming within my knowledge of disease being protracted beyond the seventh day from the application of the contagion. Shut up, as the whole community latterly were, and cut off from every source of danger beyond that which their own premises might at the moment offer, at the same time being examined twice daily by medical practitioners, it was no difficult task to ascertain this point, with a degree of precision that may never, perhaps, again occur to any British practitioner.

The question of "How long the contagion of plague may remain in the constitution before morbid action becomes evident," is one, I am aware, of much importance, and one that has attracted much attention from the variety of opinions upon the subject, as well as from the general tendency of those opinions. My own belief is grounded upon the most unequivocal proofs, having examined this point with much attention, and a very high degree of interest.

It is maintained by many, that instances have occurred, of persons being attacked with plague fifteen, nay, twenty days after communication with the infected object, nor were there wanting professional persons to support this belief on

the spot, and during the very plague of which I have just spoken. If we except that most unaccountable of all maladies, Hydrophobia, there is no disease dependent upon a morbid poison with which we are acquainted, that does not declare itself within a very few days after the application of its peculiar poison, and this is particularly observable in small-pox, which, in its general character, approximates nearer to plague than any other disease whatever. Nor does it appear probable that the human system is capable of retaining, (without any evident symptoms,) for fifteen or twenty days, a poison, which is sufficient to destroy life in a few hours after the first warning of sickness, nay, after its application; results which, in plague, have been repeatedly witnessed: speaking from my own experience, I can assert, with the most perfect confidence, that, in no one instance, could a single case of plague, where the appearance of disease after contact was supposed to have taken place beyond the period when I consider all danger to be at an end, bear the test of inquiry, every such case being satisfactorily traced to a fresh cause. Let it be borne in mind, that the danger from infected goods is, at all times, that which we have most to dread; and danger from this source is so multiplied in time of plague, that, unless the most unremitting attention be paid, even in the instances where we have reason to be assured

that every measure against contagion is in full force, we are likely to meet with hourly vexations and disappointments, and it is then that we hastily attribute to the peculiar nature of the disease, that which, in truth, originates in our own neglect. The nature of plague is such, that, if we ever mean to arrive at perfection in the necessary system for the detection and final eradication of the disease, we must disbelieve every thing that is not both morally and physically true.

I full well recollect a circumstance, which in itself I consider sufficient to impress upon the minds of the most incredulous, the truth of what has been here advanced; a circumstance, I regret to say, of a very fatal nature, and which occurred to us in the very heart of one of our best regulated camps in Leftimo.

A family of the name of Vlasi, under the second grade of suspicion, was transferred to, and received at the barriers of the camp; where, previous to admission, they were, according to rule, examined, and following the regulations of the camp, they were subjected to immersion in the sea. This, as was customary for all, except the higher degrees of suspicion which were under medical treatment, was resorted to daily, and the constant immersion of their susceptible effects was also performed as a matter of course. The family too underwent medical inspection at

this period twice a day, for the purpose of early detecting disease, should it unhappily break out. This state of things continued for the space of seventeen days, every individual of the family enjoying the most perfect health. On the eighteenth morning after their arrival, symptoms of plague were discovered at the medical inspection; in less than twenty-four hours, out of seven persons constituting the family, four offered the most unequivocal signs of plague, another was taken ill the following evening, and notwithstanding every effort for their safety, five of the seven fell victims with very little respite. The tent was in the midst of many others, some not ten feet removed; but disease did not advance beyond the spot where it broke out.

The occurrence of this melancholy event, favoured the opinion, that plague was of that undefined and capricious character, that the period of its duration in the system, previous to its declaring itself, could not be calculated upon, and that even danger was to be apprehended after the lapse of twenty-one days. For my own part, I was perfectly convinced that the unfortunate event owed its origin to fresh causes; yet, anxious as I was to ascertain its source, I dreaded much difficulty in detecting it. When his Excellency the Lord High Commissioner was made acquainted with this disastrous event, I received the most positive instructions to leave no measure untried

that was likely to lead to a discovery of this extraordinary appearance of plague, where security ought to exist, and where danger would not have appeared, if the persons intrusted with the superintendence of the camp regulations had performed their duties. This was the impression upon the mind of his Excellency, arising from a firm conviction of the efficacy of the means, had they been properly applied. However unpleasant this duty was, it was one of a paramount nature, as the discovery of the true cause of disease was necessary to remove the dangerous tendency of the belief, that notwithstanding all our exertions, we were yet in the dark as to some of its most important peculiarities. A strict investigation immediately took place, conducted with all the solemnity of the Greek church; a priest, in full robes, bearing the crucifix, appeared in front of the tent of these unhappy people, exhorting them to an avowal of the cause of the disease. We rightly conceived, that this imposing ceremony, at a period so awful and impressive, (most of the family being then on the eve of departing for the hospital,) could not fail of producing some effect. The inquiry was pursued with much zeal by Assistant Surgeon Gemmellara, who had the medical charge of the camp: and the following statement is extracted from his report on the subject. It appeared that one of the unfortunate females,

previous to her quitting her house for the camp, had concealed some cotton, which she had received, tied up, some days before, from a friend, for the purpose of making it into thread; it was wrapped up in a part of her dress, and as it escaped the attention of the health guardian, who superintended the camp duties, immediately after entering the tent she suspended it from the ring at the upper end of the pole, where she allowed it to remain, unwilling that it should be immersed in the sea; it continued in that situation unnoticed, removed as it was from the eye of inspection, notwithstanding the extreme accuracy with which these inspections were made, every tent being examined from without daily, and the walls of the tents being raised a foot from the ground during the performance of that duty. The cotton was only removed from its place of concealment the morning preceding the breaking out of the plague amongst the family, when it was taken down with the utmost confidence, without the least suspicion of danger, and divided between the females, four in number, to be made into thread, more for pastime than to meet any want. The name of the family from whom the cotton had been received, was quite sufficient to lead us to the object of our investigation; plague had made ravages amongst them, and it was in consequence of their vicinity to the last mentioned family, that suspicion attached to the

family of Vlassi, and for which they were transferred to camp. An unfortunate disposition, and susceptibility to disease in this family, rendered them easily accessible to contagion, which was evident from the sudden attack of four about the same period, a circumstance very rarely noticed, as in general the attacks were observed to be in distinct succession.

Sincerely do I wish that this was the only opportunity granted me to speak decidedly upon the causes which were known to keep up disease; a repetition of such facts would be an intrusion upon the public, the circumstance recorded being in itself sufficiently illustrative of the point in question. With it, therefore, I conclude the histories of the plagues of the Ionian Islands.

As the plague of Cephalonia was speedily eradicated, the quarantine restrictions, placed upon the whole island, were not, as might have been expected, of any serious consequence to the welfare of the inhabitants; indeed, the whole of the restrictions were early removed, in consequence of the breaking up of the Pest Hospital, so soon as the convalescents were in a state to be transferred to a field hospital, established on the little uninhabited Island, Dascalio, not more than half a mile distant from our shore, in the channel of Ithaca, where the salubrity of the air materially contributed to their speedy recovery.

It may, perhaps, be permitted me, before con-

cluding this part of my subject, to notice that, soon after my arrival in Cephalonia, a special commission was appointed, for the trial of all persons violating the laws of quarantine within the district of Erisso, over which commission I had the honour of being placed ; the local Government authorizing me, not only to approve, but to carry the sentence of the commission into execution, without further reference. It is peculiarly gratifying to me to be able to state, that such was the public confidence and implicit obedience of all classes to the orders of Government, that, in no one instance, was there an appeal to the law.

CHAPTER VIII.

Brief Sketch of the Plague at Noia.—The Measures immediately taken to confine the Contagion.—The Efficacy of Cordons further proved.

THE numerous and unquestionable facts, that the histories of the plagues of Malta, Gozo, Corfu, and Cephalonia, offer, in regard to the specific contagion of that disease, will be viewed by every unprejudiced reader as more than sufficient to refute the contrary doctrine; nevertheless, it is due to the public at this moment, agitated as the important question of plague has been, to bring forward such additional matter as must at once remove every doubt upon a question, the issue of which cannot fail to be of vital consequence to our national interest, as well as to the welfare of our fellow creatures.

Upon this principle, a brief sketch is here added of the late plague of Noia, as formidable an enemy, in point of fact, to the disbelievers in the contagion of plague, as any that has come within our knowledge; and although the source from whence it was introduced is still involved in obscurity, the most fastidious enquirer cannot oppose its foreign origin.

The best informed amongst the inhabitants of

the country attribute the introduction of the plague into Noia, to infected goods, smuggled from Smyrna, whilst others believe it to have been introduced from the coast of Dalmatia, where plague was at the time raging, being also a country with which the inhabitants of that part of the Neapolitan territory were in the habit of constant intercourse. However satisfactory it may be to a government to be able to trace the source of so great an evil, in point of practice it matters little; it is quite sufficient to be aware of its actual presence, as wherever it may have been imported from, when once disseminated, the treatment becomes the same.

A journal of the proceedings of the supreme Magistracy of Health, during the plague of Noia, published by authority, gives a clear and detailed account of the progress of the disease, the measures that were resorted to for its eradication, as well as those means which were adopted to ensure the safety, not only of the mother country, but of the whole continent of Europe; as it can scarcely admit of a question that, if the means employed on that occasion had proved inefficient, contagion would inevitably have speedily spread both far and near; and from the very general intercourse which, at that period, existed throughout the continent, there is no calculating the extent of the ravages that might have followed.

It was no doubt a feeling of this nature which called forth the energy excited on that occasion, and which early consigned the public safety to military cordons, maintained by an overwhelming force.

The plague of Malta, destructive as it had been to its inhabitants, was productive of much good abroad ; it became a stimulus to the neighbouring Governments to investigate their means of security against so dreadful a visitation ; and served as a useful lesson to the health authorities in general, but particularly to those of Naples ; so much so, that the moment a disease of a malignant nature was announced as having made its appearance at Noia, the suspicion of the latter authorities was at the moment roused, and we learn that the Superintendant-General of Health, at Naples, forthwith called the attention of the Health Department of Bari (in the members of which a controuling power, it would appear, was vested over those at Noia) to the instructions that had been long previously transmitted for their guidance in the event of the introduction of plague into that district ; urging, should the least doubt exist as to the true nature of the disease, or any suspicion of its proving contagious, the immediate enforcement of the severest segregation. The mask was already thrown off, the disease that at first assumed all the symptoms of a putrid exanthemata, as it was denominated

by the physicians, who were specially sent to report upon the disease, had already exhibited the most unequivocal symptoms of plague.

This fact was no sooner ascertained than all communication with Noia was cut off, the art of war resorted to, and double wet ditches were purposely formed, and every foot of both one and the other might be said to be guarded at the point of the bayonet. Whatever might be the danger within, all without was secure, unless, indeed, contagion had passed its original limits before this defensive system had been enforced, which, although, at the moment, it was apprehended, fortunately was not the case. Suspicion, of a high degree, attached to some goods that had been sent from Noia to Monopoli; these were immediately seized by order of Government, and destroyed on the spot—no untoward circumstance followed.

The cordons by which the safety of the country was ensured, were pushed close to the town, the first ditch being only sixty paces from the habitations, and the second thirty in the rear. A body of twelve hundred men guarded these ditches, and although the plague continued its ravages in Noia for six months, this large body of troops continued in the performance of their duties in the most perfect safety.

The first alarm of disease, at Noia, occurred on the 24th of November, 1815, in the person of

Pasqua Capelli, an aged female, the wife of Laborio di Donna, who himself died on the preceding day; and whose death was attributed to *hemiplegia*; after these events disease was observed to extend gradually to the immediate relations of the deceased, and after the lapse of a few days, appeared also in a family named Sorino. The appearance of disease in the family of Sorino, attracted much attention, and some suspicion, from their contiguity to a store room of the brothers Maestro Giacomo, from whence the evil was now believed to have emanated; further sickness soon followed, and was satisfactorily traced to communication with the person previously under disease; the chain unbroken soon extended itself, and the general dissemination of contagion followed.

These are the outlines of the first advance of plague in Noia; and its continuance for so long a period will easily be accounted for, when, on the perusal of the publication alluded to, it will appear that the infected families were so numerous, and so intermixed with each other, that the authorities gave up all hope of being able to confine them within their respective residences; an operation stated by them to require such a multiplicity of detail and difficult execution, that its arrangements would be carried away by the torrent of confusion that would follow, and lead the way for a greater evil than that which it was

intended to remedy. Instead of these imaginary difficult measures, the authorities contented themselves with substituting the concentration of the contagion, and the removal of those attacked, so soon as they were detected ; measures which, I cannot help saying, bore no analogy to the ability displayed in the arrangements for external security. That an entire population can be shut up without any one of those difficulties, the histories of the plagues of Malta, and the Ionian Islands, sufficiently affirm and approve. That segregation, in its fullest extent, was not resorted to, is the more to be wondered at, when we reflect how admirably well the true principles of the action of the plague were understood by the magistrates ; and so happily delineated in the following excellent observations, translated from the original work :—

“ If it were possible to surprise a habitation
“ at the very instant when a contraband spirit
“ had introduced an infected article, or at the
“ moment when imprudent avarice unpacks his
“ bales, and exposes himself to contamination,
“ it would not be difficult to confine the plague
“ to the primitive and natural spot of its development, and to destroy the shoot in its very
“ budding ; but where the disease has, for any
“ length of time, diffused itself without being
“ discovered, and mowed down its victims with
“ a hidden hand, where the contagion has in-

“sinuated itself into objects, taking root in so many different directions, it forms (if the expression may be used) so many eccentric circles, that it continues propagating itself every instant, with a sort of expansive rotation, operating alternately on men and things.” Nothing can better explain the march of plague; and these very principles ought to have pointed out the absolute necessity of following up the advance of contagion, in this instance, with increasing energy and determination, never allowing it to rest until rooted out of every corner where it might have insinuated itself. Enough has been already said on this subject, and practice has proved its efficacy. On the whole, the measures of general safety, followed at Noia, are deserving our best attention; and as the limits of this work will not permit my entering more into the detail than is absolutely necessary for the avowed object of establishing the contagion of plague, and the measures requisite for its speedy and effectual eradication, I must refer my readers to the valuable publication in Italian on this subject.

CHAPTER IX.

General Observations.—Plague not productive of Danger unless through the Medium of Contact.—The Necessity of Quarantine Establishments maintained.—Enforced by Buonaparte when in Egypt.—The Danger arising from Intercourse with that Country.—Mode of purifying infected Articles.—Its Efficacy particularly proved by the Experience of the Plague at Cephalonia.—Unnecessary Length of the general Period of Quarantine.—Motives to which this may most probably be attributed.—Persons usually employed as Expurgators in Lazarettos.—Is Man really susceptible of repeated Attacks of Plague?

HAVING thus terminated the general history of plague, we shall now proceed to offer such observations as have arisen from the subject matter of this work, which are closely connected with its avowed object; and conclude by opposing those important practical results, the offspring of our measures in the various plagues that came under our own management, to a false and speculative theory; firmly relying that such unquestionable evidence cannot fail to overthrow those opinions that have recently been brought before the public, reared for the purpose of invalidating the contagion of plague, and finally of overcoming the most latent feeling that may

yet be found to militate against a doctrine sanctioned by the experience of ages.

In our detail of plague we have clearly pointed out its mode of propagation; we have traced its progressive dissemination, throughout those countries subjected to its influence, to the active and virulent principle of contagion. We have shewn that in the numerous instances which have occurred within our own sphere of observation, that the disease was only effectually arrested when met with energy and decision, and that, so soon as those general principles dwelt upon throughout this work, of insulation and separation, were fully acted upon, every danger vanished. It must therefore be inferred, that the decided advantages that were known to result from the early adoption of those measures in all cases of positive contagion, entirely depended upon the absolute prevention of communication between the healthy and such persons as were labouring under plague, or suspicion of plague, or with effects imbued with the matter of contagion: and from what has been said upon this subject, the perfection of this main point of our system will evidently be considered as the principal object of our solicitude; for whatever may be the source from whence plague derives its origin, we have traced the danger to a specific virus, secreted from the diseased body, producing in man a similar disease, either by contact with

the individuals labouring under disease, or with effects imbued with the matter of contagion. This, in a word, is the true character of plague, and the history of the disease, as far as experience goes to prove the fact, offers no one instance of any person being attacked with the disease by near approach to, or by breathing the same atmosphere with the sick; whilst every attack, in many hundred cases that came under my own eye, was satisfactorily traced to positive contact with infected persons or things.

In all instances where communication had been cut off, it has been clearly proved that no danger was ever known to follow; but when this was not timely effected, and the disease permitted to run an uncontrouled course, its assault we have seen has been alike traced to the airy and comfortable habitation, and to the wretched hovel; it made no distinction in its attack between the rich proprietor and the poor peasant.

As to the advantages that were derived from an early recourse to military cordons, and the due application of those measures that were found equal to the eradication of plague, not only in those countries where they were resorted to under British authority, but also upon the coasts of Albania and Bari, the result, in all of these instances, is the best proof that can be adduced of their efficacy.

Had these measures however been resorted to

under any other circumstance of disease, originating either from marsh miasma, or those numerous causes which tend to produce a diseased atmosphere, what would the consequence of those measures have been? The question has been already pretty satisfactorily answered, but let me add that the route of infections and epidemic diseases is such, that wherever they prevail, all barriers are speedily overleaped, and instead of these diseases attacking the unwary, and all casually exposed to their influence, they are traced even to the most secluded habitation, to the monk in his cell, to the hermit within his cave, and to the prisoner confined by bars. That the reverse of all this occurs, in matters of plague, has been most clearly and most unequivocally proved.

But if plague, that disease with which we have now so long been familiarized, was any other than a disease "*sui generis*," it certainly must be admitted that it is one of a truly extraordinary character, offering, as it does, respectful regard for all public authorities of every denomination, and every where retreating before the bayonet and the badge of office.

If we pursue the subject still further, we shall at once see how far practice and recent occurrences coincide with the opinions of those who uphold the non-contagion of plague. These opinions have been previously combated, nevertheless there

are yet some facts which we cannot pass over unnoticed. We have been gravely told that a single infected person (infected with plague, we presume,) is so surcharged with danger, that a whole population may thereby become endangered.

If this doctrine be admitted, well may we exclaim, “ Happy, thrice happy Malta! after
“ all thy sufferings, fortunate art thou to escape
“ again from the dreadful malady that has so
“ recently desolated thy streets, whilst a thousand such populations as thou canst boast of
“ might, from the danger thou hast encountered,
“ and so miraculously evaded, have been long
“ ere now buried in oblivion; not only thy harbour, but thy lazaretto has repeatedly within
“ the last eighteen months been visited by this
“ much dreaded, this depopulating monster, and
“ thou hast not only admitted the many wretched
“ beings who sought refuge under their calamities within thy port, but thou hast even
“ dared to contend with the disease, to afford
“ the rites of burial to its unhappy victims, but
“ still more wondrous, thou hast also admitted
“ the surviving crews, after the performance of
“ quarantine, to pratique within thy walls, and
“ still thou art secure!” Strange and monstrous inconsistency!

But to talk this matter over seriously, events like these, it will not be supposed, are rare occur-

rences. It is well known that merchant ships, from Alexandria, Smyrna, and Constantinople, with their crews labouring under plague, have repeatedly within the last three years entered almost every port in the Mediterranean, where the British flag was flying; and many such instances took place during my residence in the Ionian Islands, without being productive even of alarm, much less of danger, and ships under such circumstances remained for days in strict quarantine, closely surrounded by guard boats, until the moment of their departure, receiving every necessary assistance during their stay; the same repeatedly occurred at Malta, and no apprehension whatever was entertained by the Government, who trusted with perfect confidence to the vigilance of the public officers, and the idea of danger from any other source than the clandestine introduction of infected goods, or communication with the crews of such ships, was never dreamt of. Experience has proved the fallacy of every contrary belief. Plague, to keep it out of a country, although at the very threshold, requires that it should only be treated as plague, subjecting it to the common rules of quarantine, and that upon the plain and simple principle of alone considering it what it truly is, contagious and alone contagious.

These observations lead me necessarily to offer some remarks upon quarantine (the propriety of

which has recently been questioned), trusting that, interwoven as the subject is with plague, in fact inseparable from it, that they will be received with an equal interest with the matter already brought forward.

Every person acquainted with the nature of plague is perfectly aware that the great danger to which we are exposed from this disease, is from its frequently creeping upon us unawares, masking its advances, and firmly laying hold of a community before we are at all aware of its existence; and if we examine the particulars of the different plagues that have occurred, and which for centuries past have desolated Europe, we shall find that there is scarcely a case on record, where the plague was not clandestinely introduced, and in many instances in countries where the laws of quarantine have been enforced with the most scrupulous attention to the public safety. Unfortunately such is the avaricious nature of man, too frequently ready to evade all established law, for the purpose of a wretched gain, that we are never secure from danger, so long as we are in intercourse with those countries from whence this scourge is imported. I beg it may not be inferred, that I mean in the slightest degree to discredit the general principle of quarantine, established throughout Europe; far to the contrary; as I am well aware, nor will it require any argument to support the opinion,

that although these fatal events have occurred in the face of those very laws, Europe would soon become a hot-bed of disease, were it not for these institutions. It is to these establishments we owe our safety, and the ignorance we have so long been in as to the nature of this disease; as our general exemption from the contagion of plague, and consequent want of knowledge of the disease, up to the period of which we are treating, is unquestionably owing to these establishments.

The efficacy of quarantine establishments was fully recognised by Buonaparte, when commanding the French army in Egypt, and the advantages were for some time forcibly felt. These establishments were not alone confined to the various ports, but many were also formed in the interior. The recurrence of plague was what might naturally be expected, a more active state of warfare breaking down the quarantine precautions which had previously ensured safety. That this partial exemption was the effect of the measures resorted to, and not the effect of season, as believed by some, will be readily admitted from the fact of the frequent existence of plague in Alexandria, and many other parts of Egypt, throughout the year, being now so well established, that clean bills of health for some years past have been very rarely issued from the consular offices in those countries.

It is a well known fact that Egypt has for centuries back been a scourge to Europe. The plague which was so severely felt in the fourteenth century, after nearly depopulating Cairo, was from thence introduced into Europe. Its effects are lamentably detailed by Friend, producing, according to that author, almost an universal mourning; they were more particularly felt in the most fertile parts of Europe. But it is not the christian parts of Europe only that have suffered from her commercial intercourse with Egypt: there is scarcely at the present time a well informed person either in Constantinople or Smyrna, who is not persuaded these countries owe the disease to the self same source. This belief is supported by the authority of Dr. Mackenzie, an English physician, who practised many years in Constantinople. Dr. Mackenzie asserts that the plague of that capital has been invariably traced to communication with Alexandria. That during those periods, when all communication between Constantinople and Egypt had been cut off, the former was totally free from plague, and the same exemption arising from the same cause, was also noticed at Smyrna. But even to this day we know that the pilgrimages to Mecca are amongst the most fertile sources of disease in many parts of Africa, and we are accustomed frequently to hear of the dreadful ravages committed by plague on board

of vessels returning from Alexandria, with the persons engaged on these pilgrimages. If I am not mistaken, the plague which very recently made such alarming progress in the empire of Morocco, was owing to this very cause.

To enter into an examination of the causes which have tended to nourish plague in those countries from whence it emanates, is totally foreign to my purpose, yet it is evident that as the state of cultivation in Egypt has declined, so has disease continued to advance, and as our intercourse with that country has of late years been enlarged, so has our danger increased; nor will it be too much to assert, that in its present impoverished state, disease may be considered as ever abroad, and the nature of our commerce, as well as the peculiarly susceptible produce of that soil*, naturally renders all our communications, with whatever jealousy guarded, hazardous, beyond all former periods; and this state of danger does not apply to ourselves alone, but to Europe in general, every port being open, and every flag unfurled, in carrying on trade with that dangerous territory.

It is not for me to particularize the benefits we derive as a commercial nation from this intercourse. The support granted by his Majesty's

* Considerable quantities of flour are annually exported from Alexandria to the different ports in the Mediterranean.

Government to the Mediterranean trade, and the spirit with which it has been invariably maintained for a long series of years, are in themselves sufficient evidence of the importance of this branch of our commerce; consequently, it behoves us the more, to be prepared to meet the very worst danger to which this mutual intercourse may subject us. Sound policy, as well as humanity, dictate it, and there is little doubt but that prejudice, yielding to reason, will ultimately enable us, not only to meet, but to overcome danger when present, and finally to remove many of those commercial fetters which are now so seriously felt from an unnecessary extension of quarantine.

The experience recently acquired in plague camps sufficiently establishes this opinion, as it has been proved, beyond a doubt, that susceptible effects, of whatever texture, and however impregnated with pestilential virus, can be securely purified by subjecting them to the combined, or even individual action of pure air, and water; and the more readily, when immersion is followed up by exposure to the all-powerful influence of certain degrees of heat. This was ascertained by actual proofs, both at Corfu and Cephalonia, but more especially at the latter island; and the period necessary for the purification of contaminated goods was found to be extremely limited under these processes. At

Cephalonia, the tents which had been employed in our plague camps, after the simple process of being washed half a dozen times in salt water, and dried in the sun, were subsequently (with the most perfect conviction of the efficacy of the means of purification) delivered by me into his Majesty's stores, and soon after employed in the encampment of the garrison. Previous to our being thoroughly satisfied, that this process would prove effectual, many articles of this description, from a suspicion of danger, had been destroyed. Our first trials originated in necessity, and, from the success that followed, we felt ourselves authorized to pursue those trials, which terminated as favourably as we could possibly wish.

Happy would it be if the effects of this morbid poison, upon the human frame, could be equally, and as successfully, acted upon by any means within our reach; but unfortunately we have as fully recognised the difficulties attendant upon the one, as we have the efficacy of the other.

Returning then to the principle, that infected articles become thoroughly purified within a very few days, when fully subjected to the effect of either of the active agents above-mentioned, it will be admitted that every bale of goods, received into a public lazaretto, must, with proper attention, be early freed from all danger; or

that, if any danger exists, it will speedily declare itself. It is presumed, of course, that accurate attention is paid by the persons destined to manage or purify such effects subjected to quarantine. This admitted, we are perfectly authorized to conclude, that, under strict and efficient means, the actual state of the most extensive cargoes of susceptible goods, can be ascertained within fourteen days.

To such as are acquainted with the mode of purification, adopted in lazarettos, this will appear sufficiently evident; particularly, as our experience is decidedly at variance with the antiquated doctrine of plague lying dormant in the system for a considerable number of days; and the same experience proving that it cannot remain inactive in any form whatever, where man is exposed to its influence, beyond a very limited period; unless, indeed, where peculiarity of constitution renders an individual altogether, or for a time, unsusceptible of its power. But to prevent the possibility of the dangerous consequences which might result from any such peculiar law, it requires that the management, or trial, of the actual state of goods, however trifling may be the quantity subjected to quarantine, should never be intrusted to one individual; consequently, if the effects, under lazaretto discipline, are duly looked after, and the common established regulations, rigidly enforced, there can be no

question of the efficacy, under the most suspicious circumstances, of an expurgation extended to twenty-one days.

Unfortunately, however, it will sometimes occur that the persons intrusted to discharge these important duties, are men in whom we cannot place that entire confidence so absolutely necessary in matters of such delicacy, and where so much is at stake ; and the duties of the superior officers are occasionally so multiplied, that sufficiently close attention cannot, in general, be granted to this important branch of the quarantine detail. I may probably be correct in saying that it was a belief in the danger of relaxation, in this branch of the regulations, on the part of the expurgators, that first occasioned the establishment of the present extended scale of quarantine, a scale which it can no longer be doubted, imposes a very unnecessary restraint upon commerce ; and which, from its severity, becomes our very worst security, by endangering the very objects for which it was framed, that of encouraging smuggling, and every other species of evasion. This observation is fully supported by every record of that disease in Europe. The placing of ships, with susceptible cargoes, in absurdly extended quarantine, does not appear even sufficient in the eyes of the quarantine law-givers ; but the same system extends (although not to the same lengthened period, yet to a very

unnecessary one) to all vessels in ballast and ships of war ; a measure, as it regards the latter, that, it would appear, originated more in the policy of states than in any solicitude for health security. What is still worse, such is the general prejudice in favour of extended quarantine, and the arbitrary power with which it is universally maintained, that we are deprived, in a great degree, if not totally, of the free exercise of our judgment in all that concerns quarantine laws.

It is pretty certain that any innovation, in what is generally acknowledged as a necessary quarantine for ships with foul bills, upon the part of any state, would, in all probability, be attended with the most serious consequences, as such avowed reduction in the established period of quarantine, for ships and goods furnished with foul bills of health, unless the same was universally adopted, would only tend to discredit the country where those measures were resorted to, and at once subject all arrivals from thence at every foreign port, to all the evils attendant upon vessels absolutely arriving from infected countries.

It is, therefore, devoutly to be wished that the present extended scale of quarantine may early become a subject of investigation, on the part of his Majesty's Ministers, the only source from whence any real advantage can be derived, and which might ultimately lead, not only to a mo-

dification of those laws, but to the adoption of one universal system in this important branch of the legislature.

Notwithstanding the unfortunate events that have proved the possibility of the infringement of quarantine regulations, and the dreadful consequences which have followed these violations, we have already clearly shewn that these are our only security in the hour of danger, and that which enables us, with the plague in our very ports, to carry on a safe and uninterrupted commerce. When, therefore, the laws, that regulate quarantine, are once prudently ameliorated, many, if not all of the inducements, to contravene them, will be removed, and this will be the best and securest barrier which we can erect in their defence.

During the plague of Malta, and at the time the same disease was advancing to the banks of the Lepanto, I was at the head of the quarantine department of Zante, and in the state of alarm produced by the ravages known to have been committed in the former place, not only the ports of Sicily, but most of the ports in the Mediterranean and Adriatic, were closed to ships from thence. In consequence of these restrictions upon our commerce, his Majesty's civil commissioner, and commander of the forces in the Ionian Islands, the late Lieutenant-General Sir James Campbell, deemed it necessary to admit

ships and cargoes of every description from Malta, and to permit the disembarkation, expurgation, and due performance of quarantine of all goods within the public lazaretto; upon the termination of which quarantine, their cargoes were reshifted and proceeded to their original destinations, with clean and accredited bills of health. This was an anxious period for the health department, and one of great responsibility; indeed, so much so, that every package, susceptible or otherwise, which was landed within the barriers of the lazaretto, was opened in my own presence, and the established rules for expurgation enforced under my own daily inspection. Fortunately, from the precautions adopted in Malta, no suspected goods were shipped; but, if the reverse had been the case, I feel perfectly satisfied, that an immediate discovery would have been the result, and, had plague broken out within the walls of the lazaretto, it could not have escaped these limits, nor is this saying much.

It is not, as I have already observed, in lazarettos, that we are to look for danger; these are our only security, and when contaminated goods produce disease in the common course of expurgation, relaxed indeed must be the discipline, if evil arises to the public from this process.

It will be observed, from what has been stated, that the expurgation of goods in a public laza-

retto, from particular motives, is never intrusted to one individual; and the propriety of this measure will appear still more evident, when we consider the species of persons who generally offer themselves, and are too frequently received, as candidates for such employment, in countries, which, from the nature of their commerce, are exposed to plague; individuals, for the most part, who are recommended upon the principle of experience, from their having had the plague, and who, subsequently to their recovery had, perhaps, rendered services to the community, when, having passed through the disease, they no longer had any motives for apprehending danger.

Admitting the commonly received opinion, that plague may attack persons frequently, through life, it is possible that those who have laboured under this peculiar disease, may at least be less subject to a second attack than those individuals who have never had it; therefore, under this impression alone, these persons should be considered unfitted for the delicate duties of expurgators in lazarettos, men, who, in the proper sense of the term, expose their lives for the public safety, and upon whose contamination, or escape from intercourse with infected articles, may depend the safety of a country; for, if goods, absolutely infected, either from neglect or relaxation of duty, are not thoroughly puri-

fied after the usual process within eight or ten days, the persons employed in expurgating them, from directly handling such effects after that period, cannot escape disease, unless indeed such a state of the constitution exists as to render them unsusceptible of contagion, and if this state continued, there would be no criterion by which we could satisfactorily judge whether or not the goods intrusted to them were contaminated, and plague might be introduced into the very heart of a capital, from those public institutions, which should ever be considered as the most sacred deposits, from whence no danger could possibly issue. What the inferences would be under such circumstances, require no explanation.

The discussion of this subject leads me necessarily to the consideration of a very important question in the matter of plague, namely, if man is really susceptible of repeated attacks of this disease or not?

We are taught to believe, at least it is a received opinion, that plague may attack the same person more than once through life. Now, although I am not prepared to combat this belief with proofs sufficient to establish beyond controversy a contrary doctrine; nevertheless, I can assert, from my own experience, that of twelve persons employed as expurgators and hospital attendants at Corfu, ten of the number had the plague at Malta nearly three years prior, whilst

the remaining two had suffered from the disease about four years previously at Constantinople; further, I employed four soldiers of De Roll's regiment, who had been attacked with the plague at Corfu, as orderlies at Cephalonia, and although the duties of all had been alike extended, these persons continued throughout the plague perfectly free from disease. There were also, amongst the number of expurgators and persons employed in removing the sick, and burying the dead at Cephalonia, several who had the plague years before at Smyrna, and in other parts of Turkey, and such was the confidence of the whole of them in their immunity from the disease, that they could not be prevailed upon to have recourse to the smallest precaution whatever. One and all escaped disease. During this exemption from sickness on the part of these persons, all our best exertions to secure their fellow labourers who had never had the disease, too frequently proved abortive; and it is deserving notice, that the only individual amongst the corps of expurgators sent from Malta, who had not previously had the disease, early fell a victim to it at Corfu. This man, Philippo Pompeia, for whose safety we were particularly anxious, had been placed as a petty officer over the others in the performance of their duty; but this precaution proved ineffectual, as the unfortunate man, contrary to the instructions

he had received, very early associated with the persons over whom he was placed, and who were necessarily so many vehicles of contagion.

For my own part, in the long intercourse I have had with plague, and with persons who have lived many years in the Levant, I have never been able to prove the fact of plague being capable of being communicated to the same individual a second time; nor have I ever witnessed a single case of relapse. I certainly have seen individuals in a state of convalescence attacked in consequence of some irregularity, with symptoms of fever, but unattended with any danger whatever; the patients recovering in a few days.

Many who have had the plague, and amongst them individuals meriting every credit, have assured me that those parts of their bodies which had been the seats of carbuncles or buboes, like the cicatrices of old wounds, upon any affection of the system, equal to the production of febrile action, were very peculiarly influenced, bringing forcibly to their feelings their past sufferings; and that whatever produced a derangement in the system, produced also an excitement in those particular parts proportioned to the nature and violence of the attack; and where the glands had been the original seat of disease, they were certain to undergo morbid change, not unfrequently terminating in suppuration. So far from doubting the truth of these assertions, I

must confess they appear to me to be extremely natural and well grounded.

The doctrine that those parts of the body, where buboes or carbuncles present themselves during the action of plague, are liable through life to be affected by every diseased action, where the sum of excitement is sufficient to produce strong febrile action, must naturally lead us to conclude that, from whatever causes this action may be produced, there is at all times a liability, if not a certainty, under such circumstances, of a recurrence of morbid action in those particular parts which had previously been the seat of disease; and according to the extent of excitement produced, may we look for a greater or a less degree of action in those particular parts. Thus the glands of the groins and axillæ already predisposed, roused by inflammatory action, will quickly assume a morbid appearance; and offer to the view the received unequivocal signs of genuine plague; which in countries, where disease raged, would, without a shadow of doubt, be considered as the same malady, although not in the smallest degree connected with it; whereas, these symptoms appearing in the common course of fevers, or any inflammatory disease, in countries where plague was neither known to exist, or was ever apprehended, the presence of such phenomena would readily be traced to the true cause, without exciting the slightest degree

of apprehension, either in the mind of the patient or practitioner.

May not, therefore, the frequency of such occurrences, which doubtless must be numerous in countries which have often been the seat of plague, have given rise to, and have maintained to the present day, the belief of the human system being never free from the danger of plague, so long as it is exposed in any degree to the influence of that disease? I candidly confess the impressions on my mind are that we certainly are not susceptible of plague more than once through life. This, I do not offer as a fact resulting from our practice, the cases which have occurred during my experience being by far too few to lead to a positive conclusion on the subject, although they strongly dispose us to the belief above expressed. By this confession I feel I acquit myself of a duty I owe to the public, as it may induce others, whom opportunity may permit, and who are inclined to tread the path of plague, to investigate the matter, and grant to it that attention which the importance of the subject appears to me to merit.

It will perhaps be expected that I should not altogether pass unnoticed the means of prevention necessary in time of plague, but, following up the principle that every species of communication has been early and satisfactorily cut off, it must be evident that all those prophylactics

that have been so strenuously recommended by authors, become as absurd as unnecessary. Let it not be supposed, however, that it is meant to deny to those whose duties exposed them to the danger of contagion, the assistance of such means as may tend to maintain healthy action, and such as are most likely to place the system in a state to resist, if possible, the force of contagion, as the most cautious may unfortunately be taken unawares in a moment of forgetfulness, and encounter danger where least expected. To such as are thus exposed, we would strongly recommend the daily use of the shower-bath, or sea-bathing, if practicable, with frequent change of habiliment, and the constant exposure of such articles as have been worn, to the open air; nor should we neglect noticing what our first lessons teach us, that in almost all contagions, cold, intemperance, and fear, concurring with the application of the contagion, have greatly aggravated the disease. The avoiding of all such causes is therefore to be recommended: "*Sobrius, castus, et quietus*," and to these should be added due attention to the state of the bowels, and small quantities of bark to be taken from time to time.

Dr. Faulkner, who was an eye-witness, and had an opportunity of investigating the plague that occurred at Malta, states, that of all the means which have come to our knowledge, recom-

mended, either in ancient or modern times, as productive of advantage in securing the safety of those engaged about the sick, none deserved more faith than personal cleanliness, avoiding contact with "persons and things imbued with the contagion," or using immediate ablution after foul contact.

As to myself, although I was hourly, for months together, within arm's length of the plague, I never once thought of prophylactics; nor, until the moment that I very unexpectedly came in contact with plague, did I ever give remedies of any description, as far as they regarded myself, a single consideration: and it was the same with every person who had a just idea of the nature of the disease, and every man acting in an official capacity, only found it necessary to avoid contact with disease or contaminated goods.

It is an established truth, and one that cannot be overturned, that, if we avoid contact with persons labouring under plague, or with effects imbued with the matter of contagion, no danger whatever is to be apprehended; and this is a fact so well understood by our countrymen residing in the Turkish dominions, that no sooner are they aware of the plague making its appearance amongst the inhabitants, than they immediately shut themselves within their respective houses: nor are they content with avoiding all communication with the inhabitants, but also

with each other, receiving even the common and unsusceptible articles of life, under the strictest quarantine regulations.

Can any one suppose for a moment, that the security of our ambassadors with their suites, and the numerous public authorities dispersed over the Ottoman empire, as well as those of the European powers in those countries, has at all times depended upon the peculiarly healthy situations selected for their residences, or from any peculiarity in their constitutions or modes of living? Is it on these accounts that they have been always exempted from the effects of those noxious causes which produced endemic or epidemic diseases, whilst all those around them became its hourly victims? Surely a supposition of this nature is too ridiculous ever to be maintained, for certainly no facts more strongly prove the true nature of plague, as no facts are better authenticated, than the security which seclusion, and the adoption of the laws of quarantine, have at all times afforded these public authorities.

Whoever of my readers may have visited Constantinople, Smyrna, Cairo, or Alexandria, during plague, will acknowledge the truth of what is above advanced, as well as the security that those precautionary measures have invariably granted to all those who have confided in them, and that, in the very midst of the most desolating mortality. But there are still more

obstinate facts to be brought forward, facts that will stand uncontroverted so long as the human mind is accessible to truth, and which shall be particularly adverted to in the following chapter.

CHAPTER X.

The Contagion of Plague proved by the healthy State of the Troops employed both in Malta and the Ionian Islands during the Existence of Plague there.—Plague contrasted with Epidemic Diseases in the Instance of the 14th Regiment at Argostoli, in Cephallonia.—Comitato, a Spot peculiarly healthy from its local Situation.—Fact related by Dr. Greaves to have occurred during the Plague of Malta, undeniably shewing the Contagion of the Disease.—Casual Diseases occurring during a Season of Plague, not to be confounded with Plague.—Necessity of Discrimination in Plague Cases.—The Atmosphere proved to undergo no Change during the Existence of Plague.

IF plague did not (as has been attempted to be established), depend upon a specific contagion, but emanated from effluvia of whatsoever description, which, aided by particular causes, became diffused through the medium of the atmosphere, thus producing disease, upon what principles are we to account for the extraordinary immunity of the numerous bodies of troops from disease, who were employed at Casal Curmi in Malta, in Casal Caccin in Gozo, in Argirades, Rominades, Perivoli, Campo Politi, Anaplades, Critica, Melicchia, Ringlades, Cuspades,

East Neochori, West Neochori, and Potami in Corfu, and Comitato in Cephalonia, independently of the troops posted up to the very gates of the plague hospitals at St. Trinita, Chlomo, St. Theodoro, Perivoli, and St. Pantaleone?

As it regards the troops employed in the islands of Malta and Gozo, I rest my assertion upon the assurances of the public authorities employed in these places. In the other instances the troops were conducted to their respective posts by myself; there are no false facts intruded upon the public, but facts, as notorious as broad day, and such as can be attested by thousands. Such facts are clearly unanswerable, and consequently our inferences are at once indisputable; for if plague depended upon other than a specific contagion, it will not, cannot be questioned, but the troops escorted by myself into the very bosom of disease, would have suffered in a much greater proportion than the inhabitants; their stay in this situation was not for an hour, or a day, but throughout the whole period of the existence of plague in that neighbourhood; yet, the troops were totally exempt from sickness in the places just mentioned. As far as it regards Corfu, it is particularly deserving of notice, that the troops which marched from the capital of that island for the various duties of the plague district, proceeded not only from comfortable quarters, but from as healthy a sta-

tion, at that season of the year, as any in Europe, nor did any sickness manifest itself in the capital, or indeed in any other part of the island, during the existence of plague in the district of Leftimo. Here we find that those very troops which proceeded from a healthy atmosphere to those regions of death, continued, in the midst of the waste of life which surrounded them, in the most perfect health, with the exception of the two small detachments, one of the regiment of De Roll's, and the other of the Royal Corsican Rangers, mentioned when treating of the plague of Corfu: among these plague was certainly introduced, but speedily checked. These occurrences we have seen took place at Marathia and Chlomo, from clandestine communication on the part of some of the soldiers composing these detachments, with infected houses. But this fact will tend to produce a still stronger conviction, when it is known that the particulars were proved before a military commission. Surely these circumstances, alone, are calculated to remove the veil that has been attempted to be cast over the contagion of plague, the more especially when we call to mind the acknowledged general law, that if we suddenly throw a multitude of persons in perfect health from a pure, into an epidemic, or vitiated atmosphere, (which must have been the case if plague depended upon any

other cause than that of a specific contagion,) the number of persons thus circumstanced, who would be attacked with the prevailing disease, would at least bear an equal, if not (as we ought to believe) a greater proportion to the population of the afflicted community. And further, if the disease depended upon any local cause pushed into action by untoward circumstances, the inhabitants assimilated to the climate, would feel the influence of these causes much less than strangers, and this would be evident, not only in proportion to the numbers attacked with disease, but also in the violence of the disease itself: consequently the inhabitated soldier would be numbered amongst the earliest victims to the existing disease, for we full well know that persons under the peculiarities just mentioned, are more susceptible of disease than the individuals residing upon the spot, yet we see the very reverse of this acknowledged law took place; what does this argue? But to proceed, the truth of these observations is confirmed by general experience, nor do I really believe it ever was questioned, as innumerable instances daily occur to prove the melancholy fact, of which, amongst many, *Walcheren* is a well known example.

We also observe similar consequences resulting in those countries on the shores of the Mediterranean, where the remittent fever runs its course

annually; and from which cause thousands of British subjects, during the late war, have found an early grave. Now, this disease, which is known to commit such havoc amongst what we term new-comers, is but mildly felt by the inhabitants, and such persons as are assimilated to the particular climate; unless, indeed, it is ushered in with an unusually high degree of malignity, and even then, the mortality amongst the inhabitants and others assimilated to the climate, whether troops or otherwise, bears no proportion whatever to the extended scale of death amongst the newly arrived or unseasoned soldier.

What has been here stated cannot, I persuade myself, fail materially to add to the catalogue of facts already adduced in support of our question; and they become the more interesting as they are supported by numerous official documents now in possession of the director-general of army hospitals, Sir James M'Gregor, whose unrivalled zeal, able and well directed exertions in the wide field of medical science, are too well known to derive any addition from any observations which I might be induced to subjoin on the subject.

The occurrences at Argostoli, the capital of Cephalonia, and what followed in the interior during the existence of plague in that island,

offer further, and equally convincing evidence, in favour of what has been just advanced; and, indeed, the facts alluded to, are of so very marked a feature as to merit a large share of attention.

At the time I am speaking of, a marsh fever broke out at Argostoli, the head quarters of a division of the 2d Battalion of the 14th Foot. To shew that this was the character of the disease, it will not be considered as irrelevant to our subject to give some idea of the situation of that town.

Argostoli is built upon the verge of a narrow marshy valley, which, backed by lofty mountains, terminates at the water's edge, an arm of the sea, stretching from a spacious bay to form a deep harbour; the water becomes shallow towards its extremity, until it unites itself with the marsh, to the very borders of which, the southern extremity of the town may be said to extend. This marsh has, of late years, considerably increased by the erection of an arched way thrown across the commencement of the shallows, which has drained, in a great measure, that part nearest the town, by preventing the occasional influx of a large body of sea water. In its original state, this influx of the sea prevented much of those exhalations that, by this ill-advised structure, erected under the shadow of public zeal, has ma-

terially affected the air of Argostoli, the offensive effluvia being now an annual scourge to the inhabitants*.

With such a fertile source for disease, it is natural to conclude that the inhabitants, in most, if not in all parts of the town, were annually, during the autumnal months, under the influence of noxious marsh exhalations; that this was the case will not be questioned, as well as that, in some years, the effects were more severely felt than in others; owing, as we must conclude, to those peculiarities of the atmosphere that occasionally aggravate and give an epidemical character to the ordinary marsh fever of a country.

In the beginning of the autumn of 1816, these combined causes operated to produce an aggravated disease at Argostoli; and its first assault, as might be expected, was upon the soldiers of the 14th Regiment, progressively attacking the inhabitants nearest the marsh, and so on, until its influence extended to all parts of the town, aided, as it was, in its operation by filth and

* Since his Excellency the Lord High Commissioner assumed the government of the Ionian States, and after which period the fatal effects of this marsh were more particularly felt, every possible exertion has been made to remedy the evil. By his Excellency's orders, and through the zealous assistance of Colonel Travers, the present resident in that island, a large portion of the most obnoxious part of the marsh has been filled up.

poverty amongst the lower classes of the inhabitants. Its course amongst them was mild in the extreme, when compared to the fury with which it, on a sudden, seized the unseasoned soldier ; and whilst recovery marked almost every case amongst the inhabitants, the mortality amongst the troops, considering their numbers, was awfully great. By the returns, which state the strength of the garrison at the commencement of the disease, their number consisted of one hundred and forty-seven men ; and of this number, one hundred and forty were admitted into hospital, of which ninety died. During the continuance of the fever, a reinforcement arrived from Zante, consisting of a small detachment of about forty men ; as these men were immediately sent to Lixuri, a town on the northern entrance of the harbour, they suffered little or nothing from the prevailing disease.

It appears from the official statement of Doctor Robertson, surgeon to the forces, then in charge as principal medical officer at Cephalonia, that such was the violence of the symptoms at the commencement of the disease, that almost every effort to arrest it proved abortive, some dying within a few hours after their admission into hospital, whilst others only survived the attack two days.

There were many causes that tended to produce a disposition to disease in the soldiers of the

14th Regiment. Amongst these, Dr. Robertson notices their want of habit to the climate, a great proportion having been men recently from England. The Doctor remarks that several of those who died, had suffered severely from the Walcheren fever, the regiment in question having formed part of that expedition; and he further notices, that the soldiers of the Royal Corsican Rangers, habituated to the climate, who had been admitted into hospital with the prevailing disease, suffered only in proportion with the inhabitants, one death alone occurring amongst the many attacked.

Upon my arrival at Comitato, I found a detachment from the same division of the 14th that had marched a few days previously, investing that village, being at that time, as we have seen, the seat of plague; and on my requisition to Government, for a larger military force for the service of the plague district, full one-third of the original strength of the garrison marched for the interior, reducing the troops to the numbers that constituted the garrison at the moment they were assailed with the fever of the country.

The movement I have here alluded to, had scarce been effected, when their comrades in Argostoli became victims to disease; which, in the words of Dr. Robertson, in a letter to myself upon the subject, was, "far worse than" plague, exceeding any thing he ever met with

“or heard of,” two-thirds of his numerous sick, (according to his statement,) lying at the time without hopes of recovery; notwithstanding among the numbers of the very same corps, who were treading the very path of plague, not a single instance, even of a doubtful nature, attracted attention; although they continued within the grasp of disease, that very disease which we are now told is any thing else but a contagious disease, preserving the most perfect health throughout the whole period of this *peculiar epidemic*; and this healthy state continued, notwithstanding they were breathing the same atmosphere, which, according to the monstrous doctrines, now intruded upon the public, must have been the source of annihilation amongst their fellow creatures, inhabitants of the country, who every where surrounded them.

What will the speculative theorist say to all this? Here those fortunate resources in all inexplicable cases, want of predisposition, peculiarity of constitution, with their numerous *et ceteras*, must fall to the ground. This is one of those rigid facts which speaks for itself, and which must be acknowledged as conclusive, even by the most prejudiced. At Comitato there were no local causes (beyond the absolute existence of an introduced contagion) to produce disease; it was even remarked to be a spot peculiarly healthy; in no part of the world was robust old

age more conspicuous; the people looked upon a century as a common span of life, and many at the time had passed that period by several years, and at that age were in the full enjoyment of all their faculties. During the transfer to camp we witnessed two extraordinary occurrences, which will give some idea of the longevity of that peasantry. The son, a stout man of eighty-five, carried his father, a jolly old man, who, by the parish priest's account, had passed his hundred and twentieth year, on his back to camp; whilst another man, equally stout, about seventy years of age, carried his mother, who was a hundred and ten years of age, to camp, where they continued in perfect health, and returned safely to their homes at the expiration of their quarantine.

Resuming our subject, I will again ask if plague were under atmospheric law, and if it became diffused amongst us through this medium, and not by a specific contagion, would not the soldiers of the 14th, stationed at Comitato, pacing the very ground where plague existed every hour in the day, predisposed as they were to disease, like their brethren at Argostoli, have inevitably shared the same fate? At Argostoli the cause of disease was evident, there, there was no security, all were alike subjected to disease, producing different consequences, according to the individuals attacked. At Comitato the case

was otherwise, there the disease was contagious, and all who avoided contact with contaminated persons or goods, were certain of escape. The soldiers were taught to avoid it, a sense of discipline, as well as a sense of danger, prevented it, and exemption from disease was the consequence; with the inhabitants it was the reverse, they were not aware of their danger until the evil had taken root, and then, from the nature of the disease, so long as it was unchecked, it run its course, carrying its victims along with it. This is the reason why the troops, at Argostoli, could not escape disease, whilst those at Comitato incurred no risk, and why the inhabitants of the latter place were the only victims to plague. In time of plague this is what we are to expect, it is the law which governs contagion. Here are facts of a very prominent feature, facts more stubborn than any hitherto advanced, and which must certainly resist all theory; they are of that unperishable texture that, in their unornamented form, are calculated to overthrow those extraordinary towerings of fancy which can alone tend to dazzle and mislead. So impressed am I with this feeling, that I consider (and I am confident the thinking and right-judging part of my readers will agree with me) that every soldier of the 14th Regiment, who was employed at the seat of plague at Cephalonia, as well as the numerous troops employed upon a similar service

at Corfu, are so many living monuments of the specific contagion of plague.

We have already noticed the exemption from disease of the troops employed in the duties of the plague at Malta; and having done so, I would not again recur to any event that took place during the plague in that island, were it not for the purpose of bringing forward an important fact which has recently come to my knowledge, and which I conceive materially contributes to the elucidation of the subject under consideration. This fact was obligingly communicated to me by Dr. Greaves, inspector of military hospitals, and superintendent of quarantine in the Island of Malta, the more valuable, as Dr. Greaves made the observation upon the spot, and at the moment of plague.

An extensive building at the extremity of Strada Vescovo, or Bishop's-street, in the town of Valetta, had been for years occupied as a military hospital. This range of building was only separated from Dr. Greaves's house by a narrow lane not more than ten feet in width. Throughout the continuance of plague, this hospital was, as usual, occupied by the sick of one of the battalions quartered in the town, and which admitted the ordinary proportion of sick from the common diseases, incidental to the climate, the season, and a military life. The under

apartments of the hospital were partitioned into several distinct habitations, dry and comfortable; and as the building had been selected for an hospital, it is unnecessary to add, that, if one part of Valetta was more healthy than another, this was the very ground. The several entrances to these apartments were lofty and spacious, in proportion to their size, and each dwelling gave an asylum to Maltese. I have not been able to ascertain the precise number of persons who tenanted each residence, but from all I could learn, and judging from the known overstocked population of Malta, at that period, none of the apartments could have sheltered fewer than seven individuals. Plague had made considerable havoc in the neighbourhood, and at length was introduced into those apartments, seven in number; and of those, the occupants of four were in a very few days victims to this disease, whilst, of the remaining three, two only of each family escaped; independently of the ravages that were committing below, many of the families in the immediate vicinity were attacked, contagion extending indiscriminately to the upper as well as the lower apartments of these dwellings. The inmates of the hospital were closely shut in, every avenue to intercourse between them and the inhabitants of the town was securely guarded, and all communication effectually cut off. Amongst the natives at this

period it was unfortunately the reverse, as the measures of segregation were not as yet resorted to. What was the consequence?—Whilst plague was running its destructive course in every angle, every individual within the walls of the hospital continued perfectly free from danger, and this exemption from plague continued throughout the disease.

In marshy countries, and during the prevalence of marsh fever, it is by no means unusual to see the inhabitants of lower apartments attacked with this fever, whilst those above have continued for a time, and even altogether, exempt. But to whatever causes the non-contagionist may please to attribute plague, he cannot attribute it to marsh effluvia in the Island of Malta, as both remittent and intermittent fevers are there rare occurrences, attested by eighteen years of British experience, there being only one spot upon the whole island where it was ever known to exist, and the causes that produced it there have been rapidly declining for years, so as now to leave little or no vestige of marsh.

But the most extraordinary part of this statement is yet untold. I have been assured by Dr. Greaves, that the circumstances here narrated, relative to the security which seclusion afforded to the sick in the hospital, in Strada Vescovo, was communicated by him (and no doubt with the same candour and view to truth with which

he was pleased to communicate it to me), to Dr. Maclean, the learned author of "*Results of an Investigation respecting epidemic and pestilential Diseases,*" who was then at Malta. Dr. Greaves was not satisfied with stating the fact, but he conducted Dr. Maclean, as he did myself, to the very spot, clearly pointing out every circumstance which, in his opinion, was well calculated to throw light upon the subject of Dr. Maclean's investigation. Now, with all deference to Dr. Maclean, I cannot help remarking that, his taking no notice whatever, in his publication, of this truly important information, does not argue much in favour of the candour with which he either treated the public, or conducted his investigation; for, however the fact might have militated against his favourite doctrine, it behoved him to state it. As he has not done so, we certainly are warranted in concluding that, having long previously established in his own mind that contagion was a non-entity, the information he required at Malta was of that nature which he considered it better to consign to oblivion than to submit to the test of inquiry. Facts are stubborn things, and I candidly confess that the one just recorded is reluctantly brought forward; but were I to act otherwise, I should be as culpable as Dr. Maclean, who, in presenting to the public his "*Researches,*" withheld it.

For my own part, the more I examine the question at issue, the more I am at a loss to account for those extraordinary opinions which have of late been forced upon the attention of the public with such persevering industry and ingenuity. It would appear to me that the great and fundamental error of the principal upholders of the non-specific contagion of plague, has originated in their confounding other diseases, which have occasionally arisen during the actual existence of plague in those countries, the frequent seat of that disease, with plague itself. When plague is early detected, and placed under the immediate controul of an active police, and the means (now acknowledged to be calculated to counteract its dissemination) duly enforced, it is not to be apprehended that it will give rise to any other disease, which, from its wide range, or mortality, can risk being confounded with plague. Nor are we to calculate upon any other addition to the existing evil, unless some particular local causes, favoured by season, shall be equivalent to the production of disease, and which would have manifested itself whether plague existed or not, their co-existence becoming merely an accidental event. Plague is a distinct disease; as such, and knowing it solely to depend upon contagion, it is contrary to common sense to suppose, for a moment, that it is a disease of that formidable nature which admits

of no competitor. I notice this, because I am aware that it is a prevalent opinion, that, during what is denominated a season of plague, all diseases which occur partake of the pestilential character; an opinion at variance with every known principle of the disease. It might, with as much truth, be asserted, that, in large towns, where *syphilis* is prevalent, all diseases, within its range, would partake of the syphilitic character; there is as much reason for attaching belief to the one as there is to the other; indeed, Monsieur Didier expressly tells us that the atmosphere of a person labouring under plague is no more to be dreaded than that of a person labouring under venereal disease.

That plague will be imported into, and frequently met with, in countries where many local causes strongly predisposed to disease, but are not in themselves sufficiently powerful at the moment to produce it, will not be denied; under such circumstances, and where no precautions are observed, and plague is allowed to run its course, committing hourly havoc amongst all classes of society, it is natural to conclude, that if we only superadd to those causes, that which ever must be attendant upon plague in its uncontrouled form, the accumulation of sick amongst the lower classes of society, (whom we, unfortunately, too frequently meet with, crowded together in close and ill-ventilated

apartments) we shall find it fully adequate, without the addition of the train of misery, we always encounter in large and populous places, to rouse the existing predisposition into action; thus generating a disease, although totally different from plague, which might, under circumstances, be still more fatal in its consequences. The effluvia arising from the bodies of persons labouring under plague, where cleanliness and ventilation were duly observed, would, as under similar circumstances in all ordinary fevers, become immediately diluted with pure air, and would be unproductive of any danger whatever: whereas the reverse of this would inevitably follow, if attention to those essential points were neglected. The generation of a noxious effluvia would be the consequence, and this, whether the disease was plague, small-pox, measles, or any febrile disease. An effluvial fever, if I may be allowed the expression, would thus be formed, and however limited the sphere of action of this newly created hydra would originally be, there would be every danger of its being quickly dilated, and still more if those causes continued to be aggravated from accumulation of disease; an unhealthy state of the atmosphere would follow; and the evil increasing, an epidemic, in all probability, would be the fatal effect of those combined causes, adding

another and a still severer scourge to the already afflicted community.

It is not necessary to enter into any reasoning upon the truth of this assertion, it will suffice to observe, that the effluvia arising from the bodies of the prisoners at the Oxford assizes, 1750, although those persons were not even labouring under disease, was sufficient to produce the fatal effects so universally known.

But unfortunate events like these we would wish to believe as rare: but that such have been the case, I can scarcely credit will be doubted, and it is lamentable to reflect, that most populous cities, under the uncontroled influence of plague, or indeed of any other disease, where proper means are not adopted, must ever be exposed to those accumulated evils; and that such was the case, I verily believe, during the dreadful visitation of plague in London and Marseilles. But, even in the midst of this mixture of disease, it would be found that both one and the other, though perhaps ultimately marked with equal malignity, would preserve their peculiar characteristics; the newly generated disease in no instance presenting the marked symptoms of plague, whilst the latter would throughout continue true to its pathognomic character.

These are considerations, that, I persuade myself, cannot fail to excite a lively interest, as

they carry with them important practical reflections, deeply impressing upon our minds, the important advantages to be derived from the early adoption of special restrictions in every instance of plague*. Humanity loudly demands it. By their adoption we not only check the wide dissemination of plague, but in many instances we shall be enabled, by those measures of security, to prevent an evil of equal if not of greater magnitude.

If, however, on the other hand, plague be introduced amidst a healthy community, exempt from local causes of disease, as I have frequently met with it, and treated it, then it will be found to stand alone, and at the onset of disease we shall only have to contend with contagion. If under these circumstances, and with the acknowledged means at our disposal, we allow human effluvium to produce a diseased atmosphere, the fault will be our's, and we become responsible for the consequences of the new disease, and in proportion to our remissness, or the energy we employ for the eradication of contagion, in that ratio, as we have practically proved, will it be found to dilate or circumscribe itself.

And again, if plague be introduced into a

* We must except those modern upholders of speculative doctrines, of whom we may say:—*Melius pejus prosit obsit nil vident nisi quod lubit.*

country characterized by local causes, as unhealthy at particular seasons of the year, and the endemic of the soil is at the moment in its vigour, the eye accustomed to plague will readily discriminate between both one and the other; and so far from an event of this nature paralyzing our efforts, or embarrassing our practice, it opens to us another source for stamping the specific character of the disease, enabling us at once to draw our conclusions with professional precision.

The necessity of a decided discrimination between plague and other febrile diseases, has frequently occurred to myself, and to every practitioner employed in the plague duties; in fact, in no disease is a nice discrimination of more vital importance, and it is the apprehension of a want of due attention to this point, that in time of plague produces a popular dread of lazarettos, and the desire of concealing indisposition. This is not the only evil that arises from a want of due discrimination: a doubt expressed in a community where plague had recently existed, might be sufficient to involve the interests of a whole population, and those general principles were fully exemplified at Corfu.

The district of Leftimo had been just rid of plague, when we were, with no small degree of anxiety, looking out for the period which, according to the rules of quarantine, would enable

us to break up our different encampments, and fly that very ground which had granted us security under the past evil. The season of the year was rapidly advancing, which was to bring another train of misfortunes upon that ill-fated community; the face of the country was sufficient to point our danger, and we were certain that the March fever, the annual scourge of the district, was not remote; in truth its approach was much nearer than we had reason to expect, as the thermometer, within a few days, rose rapidly, and the season set in far earlier than usual, hurrying all alike into disease. But as plague had been effectually eradicated, the conviction of which was impressed upon every individual, and no equivocal symptoms presenting themselves, the bilious remittent fever resuming its ordinary course, no apprehension whatever was excited even in the minds of the most timid, that this early and unexpected appearance of disease had any connexion with the recent evil; so much so, that, when the day for general pratique arrived, it was not in consequence of this event prolonged a single hour: all barriers were removed without hesitation, and the numerous troops were received with the utmost confidence into the very heart of the capital; the sick and convalescents alone, in adherence to form, were placed under a short quarantine of observation.

The troops, from their necessary stay in the

district for some days after the developement of marsh miasmata, arrived under its influence, discharging itself both in the remittent and intermittent forms, either immediately after, or at no very distant period.

Had the plague unfortunately continued unchecked, up to the period when the autumnal fever made its appearance in Leftimo, was it to be coupled with and treated as plague, and the inhabitants who were at the moment hermetically sealed, and who by this measure had been defended against contagion, to be brought forth from their sacred asylums, quarantined as such by Government, upon their unfortunately being attacked with the endemical fever? and were they, without further consideration, to be subjected to the rigours of a pest hospital and quarantine camp; with the danger, if not the certainty, of engrafting upon such unfortunate persons, as would be thus transferred to hospital, labouring under a comparatively mild disease, a specific contagion that would, in all probability, leave them little hopes of escape? No, certainly not; as I can safely affirm that there was not a practitioner in the district, who would not have immediately discriminated between the diseases, experienced and unbiassed as they were; but if, under such circumstances, the prejudiced non-contagionist had entered this theatre of complicated disease, he would have availed himself of

the character of the prevailing endemic ; he would have discovered disease within bolts and bars ; and he would find that neither seclusion or separation were capable of granting security. These he would triumphantly hold forth as proofs of the errors of the opposers of his doctrine. He would not trouble himself about discrimination ; the pre-existence of plague would be sufficient ; and he would stamp them both as one and the same disease. This would be the course of the wild enthusiast, but happily for mankind, far different that of the unbiassed and discriminating practitioner.

Having stated thus much, we shall now see how far such occurrences may be made plausibly subservient to the favourite doctrines of plague, being under atmospheric law ; “ an epidemic disease,” a “ disease totally divested of contagion,” and by a slight view of the question, at once point out those errors which have given rise to those dangerous doctrines.

We have already proved, from the facts brought forward, that plague is not an epidemic disease. This can no longer be doubted, and this being clearly and indisputably established, I will observe that it has been admitted, ever since the days of the justly celebrated Sydenham, that all diseases, which occur during the prevalence of an epidemic, are in some degree marked by it, or

partake of its character. In its literal meaning I consider this doctrine to remain untouched, and our own practice goes to prove the truth of the observation; the epidemic tendency even continuing its influence long after the cessation of the disease.

The remittent fever which I have noticed as having been so destructive at Argostoli, stamped its type upon every, even the most trifling indisposition, that occurred during the period of its range, and was succeeded by irregular and obstinate intermittents, which were continued throughout the winter, and until the beginning of the following spring. The inflammatory diseases incidental to the winter season, were at that period unusually severe, and in all, the remittent type was distinctly observed. Their peculiarities were witnessed by myself, as the charge of the Medical Department of the island devolved upon me immediately upon the cessation of the plague.

Now although I have here shewn that, during the prevalence of an epidemic, its peculiar character may be stamped, not only upon all intermediate diseases, but it will be seen, even under circumstances upon plague itself, yet we shall find that, in no one instance, can the prevailing disease be ever marked by the true pestilential character, unless during the period of indisposi-

tion, arising from the prevailing epidemic, downright positive contact with those labouring under plague, or with matter imbued with its contagion, shall have taken place ; and then only when the system is in a state for the reception of the contagion, and before a state of exhaustion will prevent the absorption of the virus. This is what will occur, and what cannot escape unbiassed observation when plague is imported into a country during a reigning epidemic; and it is events like these that, no doubt, have led to the great error of this imported contagion being under atmospheric influence. From all this it must be inferred that the air, in the hour of plague, does not necessarily undergo any change; and that, if any does take place, it is owing to other causes than that of the simple one of contagion, and it will be also understood, that no peculiarity whatever of the atmosphere is requisite for its dissemination, consequently it follows, that whenever the contagion of plague is introduced by man or matter, into the milder latitudes, unless it be timely checked it will speedily spread itself, whatever may be the state of the atmosphere in those countries. That this has been the case we have most unequivocally proved, and further, that man, under every circumstance, unless that of unsusceptibility of constitution, will be liable to, nay, certain of conta-

mination, unless cut off from the cause: but when this is timely effected, no state either of disposition or pre-disposition to disease, will place him in the most distant danger from plague contagion; and this, although thousands may be dying about him. This is the doctrine of truth, founded upon innumerable facts; and however unpalatable it may prove to some, it must stand uncontroverted.

The contrary of what is here proved was attempted to be upheld in Malta, in support of which the frequent occurrence of glandular enlargements, unaccompanied by any general affection of the system, was brought forward with seeming triumph.

Where a close medical examination was established, and which took place daily amongst the military, and an outcry raised amongst the inhabitants against every glandular affection, buboes being one of the most received characteristics of plague, it is easy to suppose that every such appearance must have excited considerable alarm; and from their occasionally being noticed, could not fail to attract some attention, we should have supposed, however, rather amongst the ignorant than the well-informed. The fact is, those glandular enlargements arose from the common casualties of life, and were nothing more than what daily comes within our

knowledge, and under our treatment, escaping attention from their seldom meriting professional observation. But to maintain a particular doctrine, we find all these appearances dragged forth and construed into important considerations; whereas, in truth, they are as little deserving consideration as any other part of the fabric.

No later than the month of March, 1819, and in the very island of Malta, and within the sphere of a very limited number of professional friends, three of us were about the same time labouring under painful glandular enlargements from various causes; and I dare say, were we to investigate the matter, we should find that not less than a hundred cases of inflamed and enlarged glands, are to be met with every month in the year, not only here but in every population of a similar extent. But it is a baseless structure altogether, and like all theories that have no foundation but in error, must yield to well-attested facts, facts which have irrefragably shewn that plague cannot be propagated amongst us through the medium of the atmosphere, or by any other means than contact.

In fine, it requires no more proof in favour of the atmosphere being exempt from all peculiarity, either physical or chemical, during the prevalence of plague in its pure and unmixed form, than that the atmosphere of a marshy

country contains a noxious ingredient. If any can be found who doubt the latter position, if they will but pass a night in the vicinity of a well formed marsh, they will in all probability be early convinced that although analysis has not hitherto been successful in discovering any foreign ingredient in the atmosphere of a marshy soil, it is nevertheless capable of producing such a derangement in the system, as will prove sufficient to remove all scepticisms upon the question.

Let a similar experiment be made by sleeping in the middle of a ward in a pest hospital, let all contact with persons or effects beneath the roof be scrupulously avoided, proper attention paid to cleanliness, and to ventilation, and I can with safety assert that no danger whatever will follow. This is doubtless the best and surest criterion, by which we can decide; and our being well persuaded of the result in both instances, proves to a demonstration the truth that, whilst the atmosphere of marsh becomes obnoxious to life, the atmosphere of a town where plague is raging, if proper attention be paid, (unless under the peculiarity already noticed, and foreign in itself to the principles of contagion,) remains pure and unaltered.

The truth of the latter assertion was long since maintained by the accurate and philosophic

Bertholett, who in his analysis of the atmosphere could not discover that it underwent any alteration whatever during the existence of plague. And Diemerbroeck, an author of high repute, expressly states, that he could not discover the plague ever to have originated from any alteration in the qualities of the atmosphere; but in this instance I by no means, as I have shewn, ground my assertions upon the opinions of others, or upon any experiments, however ably they may have been conducted. Such is the deficiency of our means for ascertaining the actual properties of the air, that no reliance whatever can be placed upon the most scientific efforts hitherto made to that effect. Facts are not fallacious, but experiments may prove so.

Before I conclude, it behoves me to observe, notwithstanding the view I have taken of the doctrines of the opposers of the specific contagion of plague, that it is my firm belief our profession is totally free from the imputation of having amongst us those who would wantonly hurl their fellow creatures headlong into destruction.—Such however I cannot refrain from saying is the evil, which must result from our conceding, in the slightest degree, to the doctrines lately opposed to the specific contagion of plague. Its specific character must be either admitted in its fullest extent, or totally rejected. If the former,

safety will be found to follow the adoption of those measures we have so fully dwelt upon, even when resorted to in the very worst crisis. If the latter, it is unnecessary to advert to the consequences ; they will be speedily and fatally proclaimed to the world.

SUPPLEMENT.

IT would appear, that Providence had interposed, at this particular crisis, to evince, in a most especial manner, the specific contagion of plague. Since writing the preceding pages, additional facts have occurred in support of the doctrines that have been advanced on this subject, more important and interesting, from their having again taken place under the British Government.

I annex a translation *verbatim*, from the official reports transmitted to Government, on the occasion, by the officers presiding over the health departments where the occurrences took place.

REPORT

Of the Superintendent of Quarantine, made to Government upon the Arrival at Malta, of the Bombard, La Trinita, Francesco Azopardi, Master.

On the 28th March, 1819, the English bombard, the Trinita, commanded by Francesco Azopardi, arrived in the port of Marsa Scirocco, in this island, nine days from *Susa*, and two from the Island of Lampedosa; with a crew consisting of five persons, including the said master, and having on board the following cargo, shipped at *Susa*: viz.

50 Hampers of hard soap,
28 Jars of oil,
2 Jars, ditto,
500 Bottles of rum,

destined for this island.

Captain Azopardi, having been called by the military authority, stationed at the Martello Tower of Marsa Scirocco, approached the shore in his boat, to the south-west, without any communication, a landing being prohibited; he deposed the above particulars of his voyage, adding, that in the preceding night, the 27th, about nine o'clock, owing to a contrary wind, he was compelled to anchor in that port, where he remained without lowering his boat, or holding any communication whatever with any individual, until half past four o'clock, A. M., when he made sail for the harbour of Marsamuscetto; but that, in consequence of the wind increasing, and conti-

ning contrary, he returned to his anchorage at Marsa Scirocco, on the same day, about ten, A. M. And he further declares, that one of his crew, Michele Casaletto, aged 18, was attacked with fever, on the 18th March, (the day previous to his sailing from Susa) accompanied with head-ache, debility, and foul tongue; that on the 21st, he was seized with vomiting, and that some alarming symptoms following, he, Captain Azopardi, deemed it necessary to anchor at Lampedosa, on the 22d, where, a few hours after their arrival, Casaletto died. The Captain observed six or eight petechiæ of a large size, and of a dark black colour, scattered over the abdomen and thighs of the deceased. The body was put into the ship's boat with the whole of the deceased's wearing apparel, and having been secured by a proper weight, was thrown into the sea, three miles distant from the said port. After this event, the Captain stated, that he remained three days at his anchorage without disembarking, where he was closely guarded by some armed inhabitants, who were stationed on the shore, having, at the moment of his arrival, announced to them the indisposition and subsequent death of one of his crew.

Upon this deposition being taken, the Captain was immediately ordered on board: guard-boats, under the charge of health guardians from this office, were placed over the bombard, and a military cordon protected the neighbouring shore. In this state she was detained by contrary winds, until the 28th of March, on which day, it being perfectly calm, she was towed, with all the precautions which the case merited, by six boats from this office, into the quarantine harbour, and was immediately conducted to, and moored within the segregated space between the islet of this lazaretto, and the rock called

Tascbesc, where she was closely guarded by quarantine boats, and a military cordon secured the whole.

In the medical examination of the crew, all alike appeared in perfect health; and, upon inspecting their bodies naked, there was no mark to be observed, in the least indicative of plague.

On the first of April, about nine, P. M., one of the crew, Michele Lubrano, twelve years of age, was attacked with pain in the head, fever, and general indisposition, accompanied with a very foul white tongue: there was a slight pain under the left arm, and prostration of strength, to that degree, as to be unable to stand unsupported. On being examined naked the following morning, a small swelling was observed under the same arm, which gradually increased until evening.

From the symptoms of the disease with which Casaletto was attacked, and his subsequent death, and that of the disease of Lubrano, both one and the other were considered as pestilential; therefore, without the smallest loss of time, orders were issued, that the vessel should be well moored with sufficient anchors, and the duty to be performed by the ship's crew. So soon as this was effected, the whole of the baggage, mattresses, and wearing apparel, belonging to the crew, with all other susceptible articles, were removed from on board, and carried in her boat, to the islet on the beach, near the hospital, situated at the extremity of this lazaretto, where the whole were burnt and reduced to ashes. This operation being terminated, the crew were disembarked at the hospital of the lazaretto, where they were stripped naked, and their clothes committed to the flames; and after being well washed, and their bodies anointed with mercurial unction, and clothed, with clothing effects furnished

from this office, they were separated one from the other, and placed in different apartments of the hospital.

Upon three of these sailors, thus arranged in hospital, symptoms of disease, of precisely a similar nature, were observed in the following order: Giuseppe Rizza, was taken ill on the 3d of April; on the same day a bubo was discovered in the left groin. On the 4th, Vincenzo Majori was attacked, and in the same afternoon, a bubo was noticed in the right groin; and on the 5th, Fortunato Zahra was added to the list, with a bubo in the left groin. Giuseppe Rizza died on the 5th, and Vincenzo Majori, on the 8th; Fortunato Zahra and Lubrano are gradually recovering. The Master, Francesco Azopardi, and the persons employed in the different services, all continue up to the present period in perfect health.

The vessel segregated, and under vigilant custody, is likewise subjected to a rigorous purification; and the individuals put on board for this service, continue in perfect health.

From the first moment that the Trinita arrived in the ports of this island, every measure of discipline was carried into execution, which the importance of the case demanded, in order to prevent more fatal consequences. There is, therefore, the best grounded hopes of our being enabled to extinguish this disease, within the isolated boundary destined for these jealous operations.

(Signed) ROBERT GRIEVES,

Superintendent of Quarantine.

Office of Quarantine,

Malta, 11th May, 1819.

In reference to my report under date of the 9th ult. relative to the bombard "La Trinita," which arrived in this port on 28th March last from Susa, infected with plague, I have the honour to inform you that the means resorted to for the purpose of overcoming that contagion in the lazaretto, have been crowned with complete and happy success.

The bombard, after having been placed under water for the space of ten days, (the non-susceptible cargo having been immediately upon her arrival placed in the lazaretto,) together with all her sails and rigging, was subsequently expurgated by a fresh crew, under the direction of health guardians belonging to this office, and all are now undergoing their quarantine in the vicinity of the lazaretto.

Both Michael Lubrano, and Fortunato Zahra, are perfectly recovered, and are now performing their quarantine in the lazaretto, together with their attendants, who are free from all suspicion. Captain Azopardi and the guardian have been separated from the sphere of contagion for forty days, and now perfectly secure, performing their quarantine in the lazaretto.

After the attack of Fortunato Zahra, on the 5th of April, not the slightest appearance, or even suspicion, of the effects of contagion, have been manifested; and as every proceeding connected with these important circumstances was followed up with the most minute attention

and activity, I have no hesitation in expressing my conviction that this disease has been fortunately extinguished with the loss of only two individuals.

I have the honour to be, &c. &c. &c.

(Signed) ROBERT GRIEVES,

Superintendant of Quarantine.

TABLE,

Shewing the various Cases of Plague, with the Mortality and other Particulars, which occurred on Board the Ionian Brig St. Spiridione, Michele Zafaropolo Master, which Vessel arrived at Zante on the 18th June, 1819, from Tunis, with a Crew consisting of Eight Persons, including the Master and Supercargo, as appeared by the Ship's Papers, bearing the Signature of Richard Oglander, Esq. his Britannic Majesty's Consul at Tunis, under Date of the 2d June, 1819.

Names of the Persons belonging to the St. Spiridione.	Date of Attack.		No. of Days ill.	Period of Decease.	
	Month.	Day of		Month.	Day of
Pietro di Papa Giovanni ..	June	23	3	June	26
Giovanni Petros	—	24	4	—	28
Dominico Zafaropolo	—	24	7	July	1
Stati Arvanatacchi	—	24	6	June	30
Captain Michael Zafaropolo	—	25	3	—	28
Stati Svrono	—	26	2	—	28
Anastasio Miziale	—	26	2	—	28
Giovanni Miziale	not attacked				
* Giovanni Patrighio	June	27	5	July	1

OBSERVATIONS.

Immediately upon the arrival of the St. Spiridione at Zante from Tunis, agreeably to the rules of quarantine, a guardian belonging to the health office was placed on board. Soon after this guardian (Giovanni Patrighio *)

had commenced his ordinary duties, and superintended the opening of the various trunks and packages belonging to the crew, the handling and airing of their contents, the whole, with the exception of one person, were attacked with plague, in succession as inserted in the table. The symptoms, in every case, were of the most unequivocal character, accompanied both by buboes and carbuncles.

The most humane means were resorted to by Government for the safety of the unfortunate persons attacked with plague; and the most decided measures were carried into effect, for the purpose of preventing the possibility of the introduction of contagion into the island. The consequence was, that this dreadful disease, which committed such dire havoc amongst the limited few exposed to its influence, was confined to its original source.

(Signed) Jos. THOMAS,
President of the Board of Health.

APPENDIX.

[A, page 61.]

PROCLAMATION

Of the Right Honourable Thomas Maitland, Governor and Commander-in-Chief of the Island of Malta, and its Dependencies, Lieutenant-General in his Majesty's Army, &c. &c. &c.

The continuance of partial cases of plague at Casal Curmi, is to his Excellency matter of the deepest regret, and the subject of his most anxious attention.

It appears from the reports that have been made to him, that these cases almost universally depend upon two causes; the one from the shameful practice which, he has reason to believe, has too long existed, of stealing infected goods out of infected houses or stores; the other from individuals having secreted infected articles in places that have escaped the vigilance of the police.

It was his Excellency's expectation, that this unfortunate malady would have been completely subdued, without the necessity of making any example, or of applying

to any individual the extreme rigour of quarantine law. But whatever his anxious wish upon this head might be, he cannot be guilty of so great a dereliction of his own duty, as either to compromise the health of the other inhabitants of Casal Curmi, or of the people in the island at large (whose conduct throughout deserves every degree of praise), by refraining longer from punishing those, who either may have the audacity to steal infected goods, or the folly to conceal them. And as the law, as it at present stands, has been found totally inadequate to defeat these two sources of propagating the plague, he is pleased to direct and to order,

1. That all that part of Casal Curmi, within the cordon of troops, in as far as relates to the plague, be put out of the king's peace, and be henceforth declared to be under martial law.

2. That a military commission be appointed to carry into effect the said martial law, as far as relates to any case of plague within the said district.

3. That the said commission do consist of Colonel Anderson, deputy adjutant-general, and Captains Andora and Muller of the Sicilian regiment, to whom instructions will be given by his Excellency.

By command of his Excellency,

F. LAING,

Chief Secretary to Government.

Valetta, Palace,

Dec. 4, 1813.

[B, page 64.]

PROCLAMATION

*Of the Right Honourable Thomas Maitland, Governor
and Commander-in-Chief of the Island of Malta and
its Dependencies, Lieutenant-General in his Majesty's
Army, &c. &c. &c.*

As the state of the public health within the Four Cities and Floriana is now, fortunately, such as no longer to require the suspension of legal proceedings, his Excellency the Governor hereby orders and directs that the Proclamation, under date of the 5th of May last, in reference to that head, be held to be revoked. And that the respective Courts of Judicature, in Valetta, do forthwith recommence their regular sessions for the dispatch of business.

By Command of his Excellency,

F. LAING,

Chief Secretary to Government.

*Valetta, Palace,
January 7, 1814.*

[C, page 64.]

PROCLAMATION

Of the Right Honourable Thomas Maitland, Governor and Commander-in-Chief of the Island of Malta and its Dependencies, Lieutenant-General in his Majesty's Army, &c. &c. &c.

His Excellency the Governor is at length happily enabled to declare that the general quarantine throughout this island will cease on the 29th instant, and that general pratique will then be granted, and free communication of every kind re-established.

Under these auspicious circumstances it becomes his first duty to manifest, in the most solemn manner, his humble gratitude (a feeling which must be common to all) for the gracious interposition of Divine Providence, in relieving these islands from the dreadful calamity with which they have lately been visited; but, of which, the fatal influence has generally been experienced to a much greater extent in other countries, where the plague has unfortunately appeared.

His Excellency, therefore, directs that Saturday next, the 29th instant, be set apart as a day of solemn prayer and thanksgiving to Almighty God throughout these possessions. On that day Divine Service will be performed in the Government Chapel; and the most Reverend Archbishop and Bishop will order the adoption of the necessary measures for the due celebration of a solemn *Te Deum* in the respective Churches within his episcopal jurisdiction.

It is his Excellency's further duty to express the high sense he entertains of the general meritorious conduct of

the public functionaries throughout the whole of so trying a period. Nor can he omit to bear testimony to the eminent good sense, and patient endurance which have characterized the people of these islands, under circumstances so painful and afflicting.

His Excellency, too, conceives this to be a most proper and fitting occasion for the exercise of that prerogative which has ever been nearest and dearest to the heart of his Sovereign; and he therefore signifies, that, on the same day, the necessary orders will be given for the pardon and liberation of all criminal offenders within these islands, save and except such as may have been condemned for murder, or such other serious and aggravated offences, against the community at large, as might endanger the public security.

Having thus done what is highly gratifying to his feelings, his Excellency, referring to the proclamation of the 4th ultimo, and following the principle, there laid down, of stating, for general information, the grounds on which he proceeds, has now to observe that, since that period, no case of plague has occurred in Valetta, Floriana, Vittoriosa, Senglia, Cospicua, Fort Ricasoli, or in the harbour and shipping; and, that there has been no case of plague, or of pestilential infection throughout the country within fifty-four days, with the exception of the lazarettos, where solitary cases still occur.

By Command of his Excellency,

F. LAING,

Chief Secretary to Government.

Valetta, Palace,

January 27, 1814.

[D, page 75.]

PROCLAMATION

Of the Right Honourable Thomas Maitland, Governor and Commander-in-Chief of the Island of Malta and its Dependencies, Lieutenant-General in his Majesty's Army, &c. &c. &c.

It is with great concern his Excellency the Governor feels himself under the necessity of stating, that, in consequence of an undoubted case of plague, which has occurred in Gozo, the following measures are rendered indispensably necessary, and must be strictly adhered to:—

1. The Island of Gozo is to be held, in every respect, in strict quarantine, and all communication with it prohibited under the severest penalties of the quarantine law.

2. Every boat which may escape clandestinely from Gozo, and land, or attempt to land, either in Malta or Cunino, shall be subject to confiscation; and every person embarked therein will be liable to suffer death for breach of quarantine.

3. All the fishing boats in this island are prohibited, in the strictest manner, and under pain of confiscation, from going to sea, except between the hours of six in the morning and five in the evening; those in the harbours of Valetta are to be collected every evening, and secured by proper officers; in the other parts of the island, they are to be drawn ashore at the nearest tower, and their oars, sails, &c. lodged therein during the night; nor will any plea or pretence of stress of weather, in contravention of this order, be admissible under any circumstances whatsoever.

4. As it appears, from the reports transmitted to his Excellency, that the communication with Gozo has been

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